Canadian Hospital

- *intrinsic worth of medical records*
- *water conditioning for laundry use*
- *remodeling speeds laundry production*
- *starch: finishing touch for quality laundry*

May, 1953

Official Journal—Canadian Hospital Council

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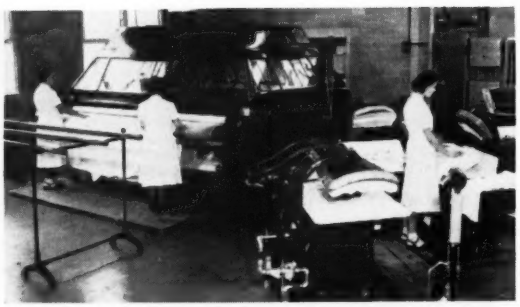

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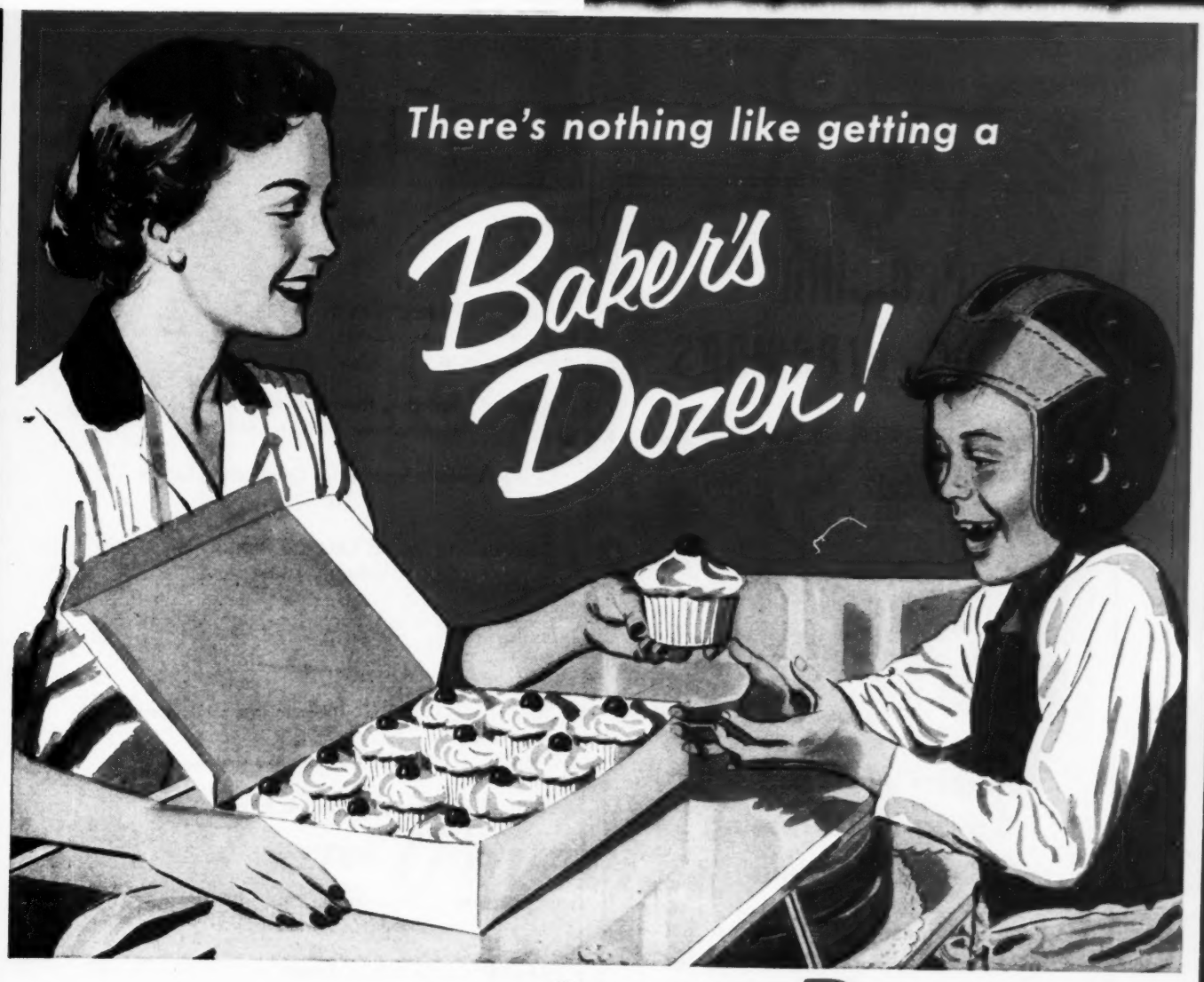

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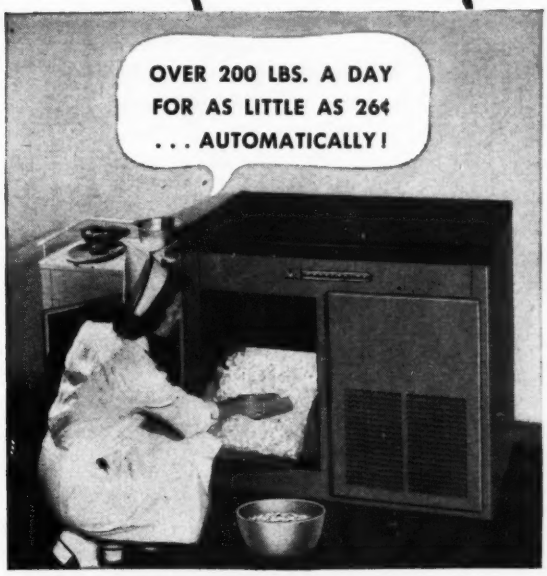

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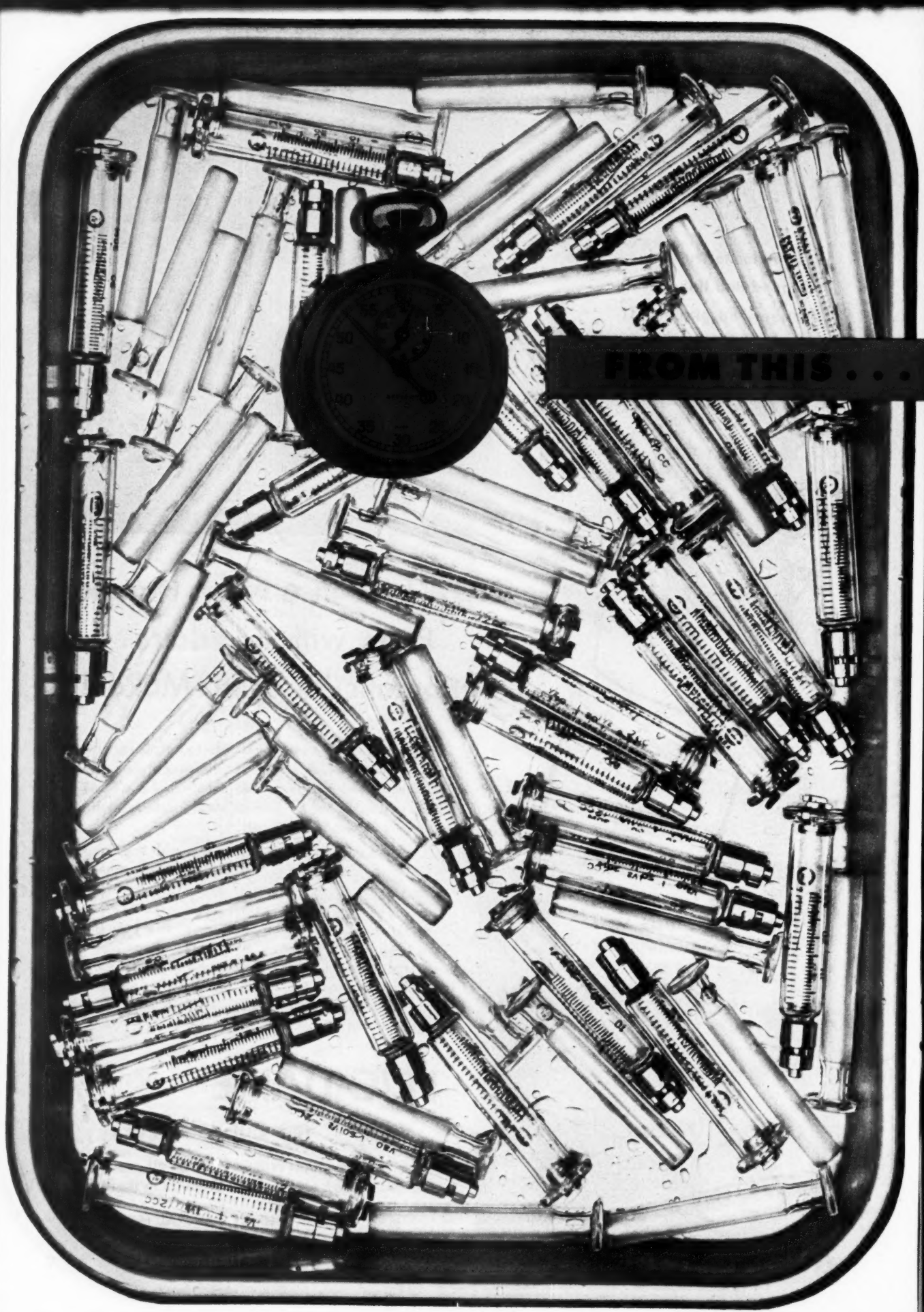
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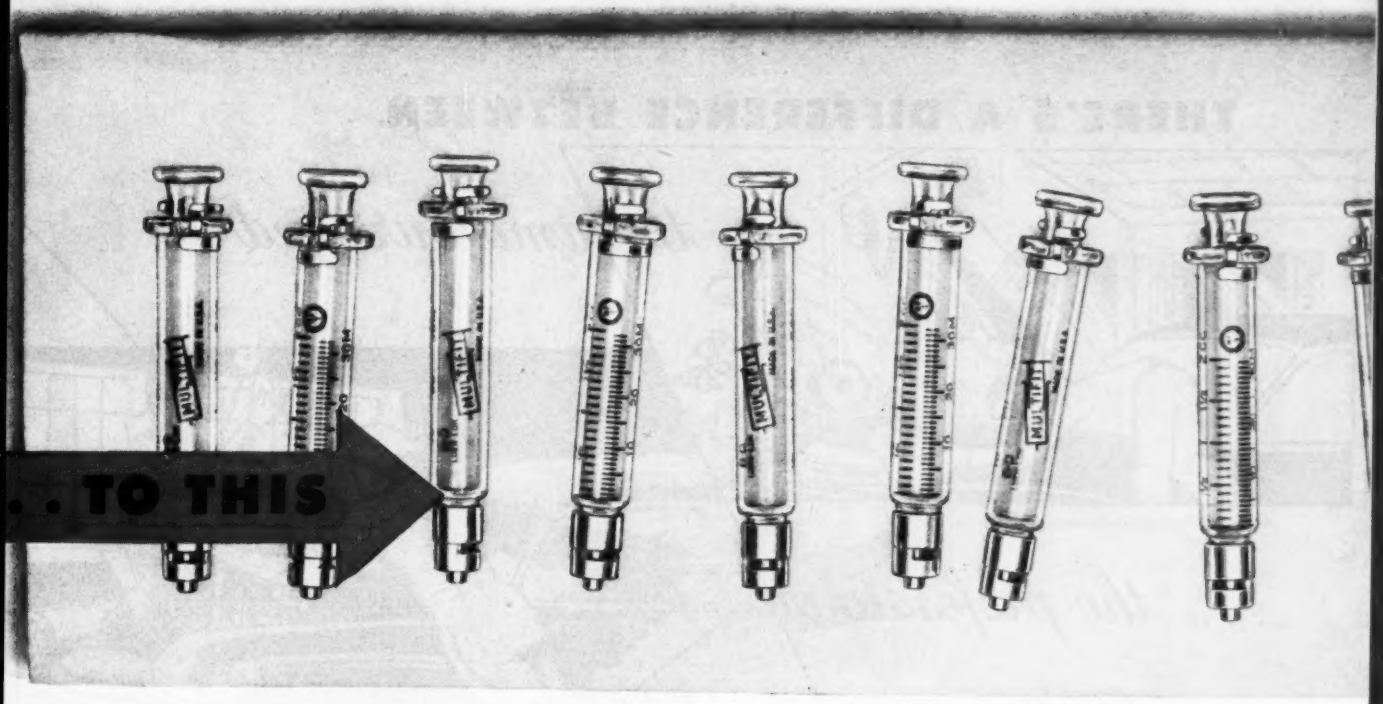

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Notes on Federal Grants

Construction

A federal grant of over $611,700, with an additional $450,000 to be provided through the Department of Veterans' Affairs, will aid in the construction of the new University Hospital and nurses' residence, Saskatoon, Sask. The new hospital, under construction since late in 1947 and not scheduled for completion until June, 1955, will contain more than 770 beds. Of these, 335 will be for general, medical, surgical, and obstetrical patients, and 100 will be reserved for war veterans in a special "veterans' section". Veterans will also have priority to 50 beds in other parts of the hospital. Nurseries are being provided for 52 infants; 65 beds have been allotted for the care of mental patients; and facilities will be provided for an out-patient department, blood bank, laboratory, pharmacy, x-ray, and physiotherapy services. The nurses' residence will accommodate 272 nurses.

Bethesda Hospital, Steinbach, Man., and the Saskatoon City Hospital, Saskatoon, Sask., have just been awarded federal grants totalling $22,100 to help meet the costs of building nurses' residences. The residence for the Steinbach hospital will have accommodation for 22 nurses and is scheduled for completion within a few months. The federal and provincial governments are each contributing $11,000. The Saskatoon City residence was partially completed before federal aid became available for building nurses' residences but it qualifies for a grant of approximately $10,100. Since federal grants for nurses' residences have been available, assistance has been provided toward the accommodation of 205 nurses in Manitoba and 489 in Saskatchewan.

The General Hospital, Sault Ste. Marie, Ont., and the Red Cross Hospital, Haliburton, Ont., have just been awarded federal grants to assist them with their building programs. At the Sault Ste. Marie hospital, additions to the present building are being planned to provide space for 88 more patients, nurseries, and living accommodation for nurses. Federal assistance has been set at $95,500. Plans for alterations in the present hospital have not yet been completed but, when they are, federal officials anticipate that it may be possible to provide a supplementary grant. Construction is to begin this spring and is scheduled for completion late next year.

A $4,000 grant has been allotted to the Haliburton hospital to help meet the cost of a new residence for eight nurses. In addition to their hospital duties, the nurses carry out public health nursing in the town and surrounding district.

The new St. Anthony Sanatorium, St. Anthony, Nfld., has just been awarded a federal grant of more than $89,000 to help meet its building costs. When the new sanatorium is completed later this year, it will have space for 54 patients; a residence for 12 nurses; an out-patient department; x-ray, surgical, and laboratory services; and an occupational therapy department. St. Anthony Sanatorium, attached to an active treatment hospital, is to be operated by the International Grenfell Association and will serve about 16,000 people in northern Newfoundland.

Crippled Children

Extension of the treatment program for cerebral palsied children in Sarnia and Lambton County, Ont., is to be carried out this year with the financial support of a federal health grant. For the past two and a half years, the Lambton County Association for the Cerebral Palsied has been operating a clinic on a part-time basis in the Red Cross building in Sarnia. During the past year, the staff consisted of a physiotherapist, an occupational therapist, a driver to pick up the children and take them home, and a number of volunteers, including nurses and senior Girl Guides. With the aid of a federal grant of $10,000, the staff will be placed on a full-time basis; a speech therapist will be employed full-time and an instructor part-time. An average of 28 children a week have been receiving treatment at the clinic. With additional staff working full-time more children can be cared for.

Mental Health

During the current fiscal year, a federal grant of $7,400 has been earmarked to aid the mental health services being carried out at the Boys' Industrial School, East Saint John, N.B. Since July, 1951, a clinical psychologist has been employed at the Industrial School where he is responsible for mental intelligence testing, appraising personality factors, and counselling the boys. When organic troubles are found to be the root of behaviour problems, the boys are referred to a consulting psychiatrist. A psychiatric social worker, who was appointed to the staff in June, 1952, is responsible for liaison with the boys' homes, with community welfare organizations, and court officers throughout the county.

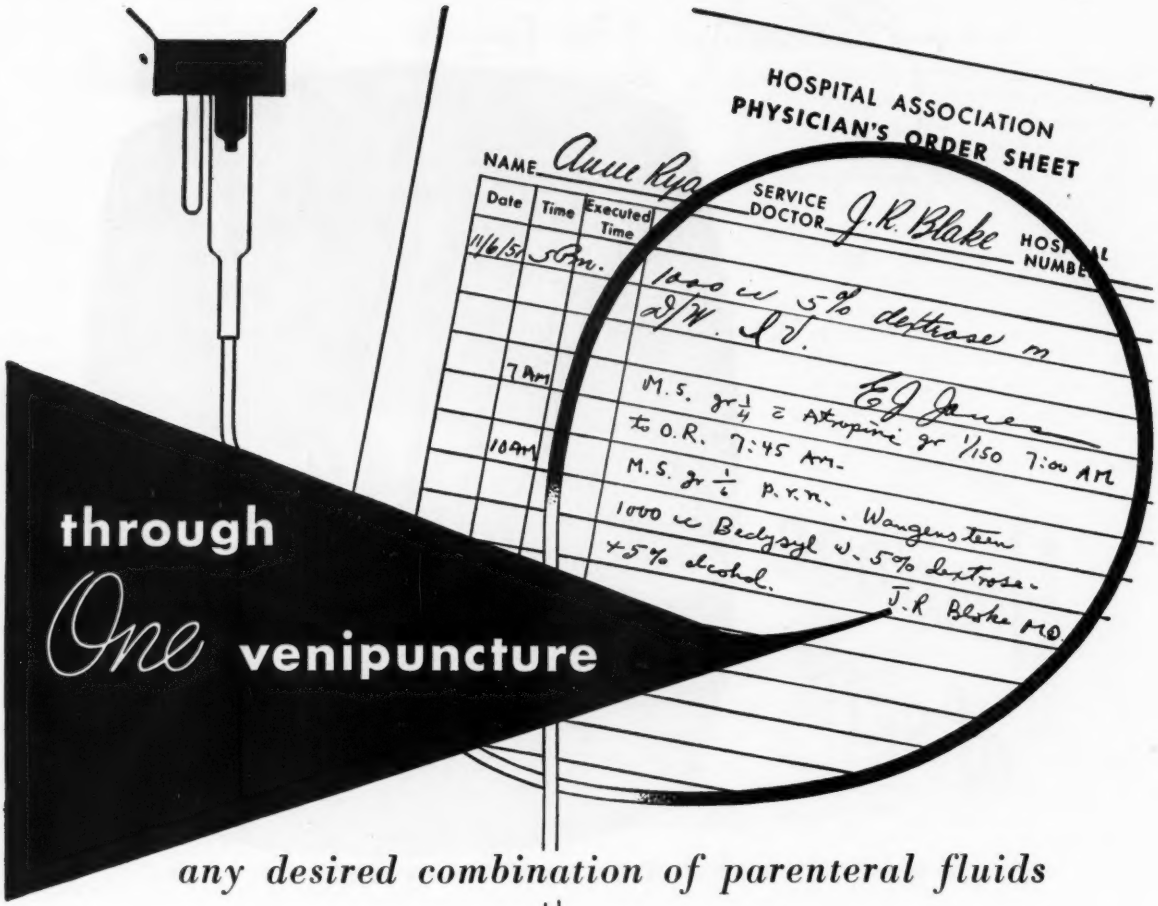
Beginning last October, the psychologist and social worker organized a series of conferences on delinquency which were attended by persons representing churches, schools, the juvenile courts, welfare organizations, child care institutions, and similar services. About $8,000 will be set aside to assist with the expenses of the mental health service for 1953-54.

Development of a community mental health clinic in Fredericton, N.B., is being aided by a federal grant of about $11,000. The clinic was organized on a part-time basis but was later made full-time with the appointment of a clinical psychologist and a psychiatric social worker. Psychiatric services are provided one day a week by a psychiatrist from the Saint John clinic but it is expected that a full-time psychiatrist will join the staff in June. The Fredericton clinic is the third to be set up in New Brunswick; the others are in Saint John and Moncton.

Personnel

Three bursaries for advanced training in clinical nursing and in cancer control have been awarded to residents of Halifax, N.S. Two of the awards go to nurses from the staff of the Victoria General Hospital, who are taking a short course in clinical nursing at the Toronto Western Hospital. The third bursary has been awarded to a doctor to enable him to visit outstanding cancer clinics in Montreal, Kingston, Toronto, Vancouver, and Seattle.

(Continued on page 16)



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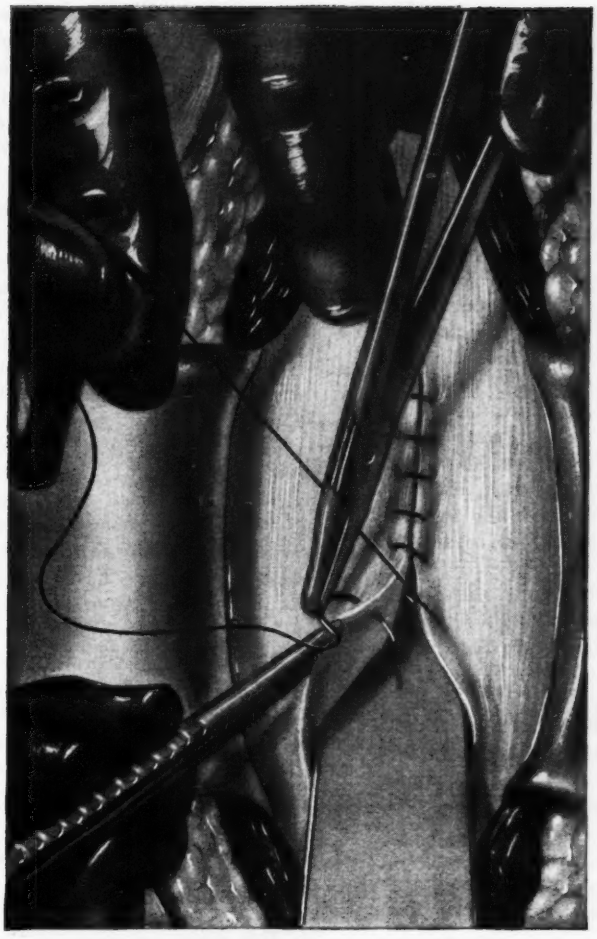

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Federal Grants

(Continued from page 12)

Public Health

A new health centre will be established in the Prince County Hospital, Summerside, P.E.I. It will contain offices for the regional medical officer of health, two public health nurses, and a sanitary inspector; space for tuberculosis, cancer, venereal disease, mental health, paediatric, and orthopaedic clinics, and for laboratory tests.

Development of this centre follows a recommendation of the provincial health survey report. The area to be served includes the former health districts numbered one to 10. A federal grant of $5,700 will be used to buy equipment and supplies required for the expanded service.

As a further step toward establishing prepaid x-ray and diagnostic services throughout Manitoba, a grant has been authorized to buy x-ray equipment for the Interlake area in Manitoba. X-ray apparatus will be placed temporarily in the Red Cross Outpost Hospital at Fisher Branch. As professional and technical staff is not yet available to provide the full service as envisaged in the Health Services Act, the equipment will be operated by the hospital at cost for the residents of this area until such time as the full prepaid service can be put into operation. Cost of the x-ray apparatus is estimated at $2,150.

The Ontario division of the Canadian Arthritis and Rheumatism Society will expand services with the aid of a federal grant of more than $65,000. A new mobile clinic is to be placed in the Toronto district and equipment will be obtained for six mobile physiotherapy units which will be used to demonstrate treatment techniques in Brockville, Peterborough, Belleville, Huntsville, Orillia, North Bay, Owen Sound, and their surrounding districts. The grant also provides salaries for six physiotherapists to staff the demonstration units. It is hoped that these demonstration units will prove their value within a year and that local Branches of the Society will be developed to carry on the work.

Approximately $22,000 of the grant will be used to buy occupational therapy, physiotherapy, and hydrotherapy equipment and supplies for the clinics at the Toronto East General Hospital, the Ottawa Civic, and the Ottawa General hospitals, the Kingston General, and the St. Catharines General, and for the mobile units operating in and around Ottawa, Kingston, Oshawa, Toronto, Kitchener-Waterloo, St. Catharines, London, and Leamington.

A new clinic, believed to be the first of its kind in Canada, is being opened by the Scarborough Township Health Department (Ont.), for the diagnosis of disease among people 50 years of age or older. Located in the same building as the township health department, the clinic will be open to residents of the township who are 50 years of age or older. It will be for diagnosis only, including urinalysis, blood examination, chest x-ray, and electrocardiogram. Problem cases requiring further investigation will be referred to the Toronto East General Hospital or to the Toronto General Hospital.

The clinic is a "pilot project" for two to three years and its work will be under frequent review. It will be supervised by Dr. C. D. Farquharson, F.R.C.P.(C) medical officer of health

(Continued on page 20)

RADIOGRAPHIC TECHNIQUE

2

Clarity

The clarity of an X-ray image is decided by its sharpness, contrast, and resolution of fine structures in the radiograph.

Sharpness is governed by breadth of X-ray source, the extent of movement during exposure, and the resolving power of the film or film-screen combination. The narrower the source, the smaller the movement during exposure, and the higher the resolving power the sharper will be the image.

Contrast is governed by the ability of the emulsion to reproduce, or if necessary exaggerate, differences in subject opacity. It can be destroyed by fog and scattered radiation.

Resolution is basically a property of the emulsion. In theory more lines per unit length can be resolved without an intensifying screen than with. In practice the greater relative sensitivity to scattered rays, when no screens are used, increases the degrading effect, and the longer exposure may bring in loss of sharpness through movement. The result is that intensifying screens often actually increase definition in the finished radiograph.

Federal Grants

(Continued from page 16)

for Scarborough Township and chief of medicine at the Toronto East General Hospital. The federal grant of more than $7,300 is being used to buy equipment and to provide the part-time salaries of the doctors and nurses who will staff it.

Additional equipment to care for premature babies is to be purchased for the Pasteur Hospital, Montreal, and the Joyce Memorial Hospital, Shawinigan Falls, P.Q., with the aid of federal health grants. Three additional incubators will be obtained for the Montreal hospital and two for the one in Shawinigan Falls. Total cost is estimated at $1,500.

The Community Health Centre, Nanaimo, B.C., and the Maple Ridge Health Centre, Haney, B.C., have just been awarded federal grants of $19,900 to help meet their building costs. When the new health centre is completed in Nanaimo, it will provide administrative headquarters for the Central Vancouver Island Health Unit; space for a well-baby clinic; laboratory; a preventive dental clinic for pre-school and Grade I children; a general clinic for child guidance, tuberculosis surveys, and other purposes. The city has provided a suitable site and the construction costs will be met by the federal and provincial governments and by grants from voluntary health organizations. The federal grant will be $15,000.

At Haney, B.C., the new Maple Ridge Health Centre will provide accommodation for the staff of the North Fraser Valley Health Unit and space for a well-baby clinic and for the mobile tuberculosis survey unit and the provincial travelling child guidance clinic. The federal and provincial governments are each contributing more than $4,900 and the remainder of the building costs are being met by a local service club, the British Columbia Tuberculosis Society, and the B.C. division of the Canadian Cancer Society.

Funds have also been earmarked to employ two or three medical students in provincial health units during the summer months. They will assist the regular staff in child health conferences, epidemiological studies and other public health problems. This project has the double advantage of assisting permanent personnel in rapidly-growing districts and of giving undergraduate medical students an introduction to public health practice.

A grant of $2,900 has been approved to add one person to the staff and to buy special equipment to give improved care to elderly women at the Port Coquitlam Home for the Aged, Port Coquitlam, B.C.

A new polio clinic and health centre to be built later this year in Fredericton, N.B., will receive a federal grant of $159,000 toward its construction costs. The new building, to be completed in 1954, will have 79 beds for the care of chronically ill patients. It will have space for tuberculosis, cancer, arthritis, and mental health clinics. Physiotherapy and hydrotherapy departments for the treatment of polio and arthritis will be located on the first floor, and a laboratory will occupy the fourth floor. This laboratory will be responsible for testing samples and specimens referred to it both by

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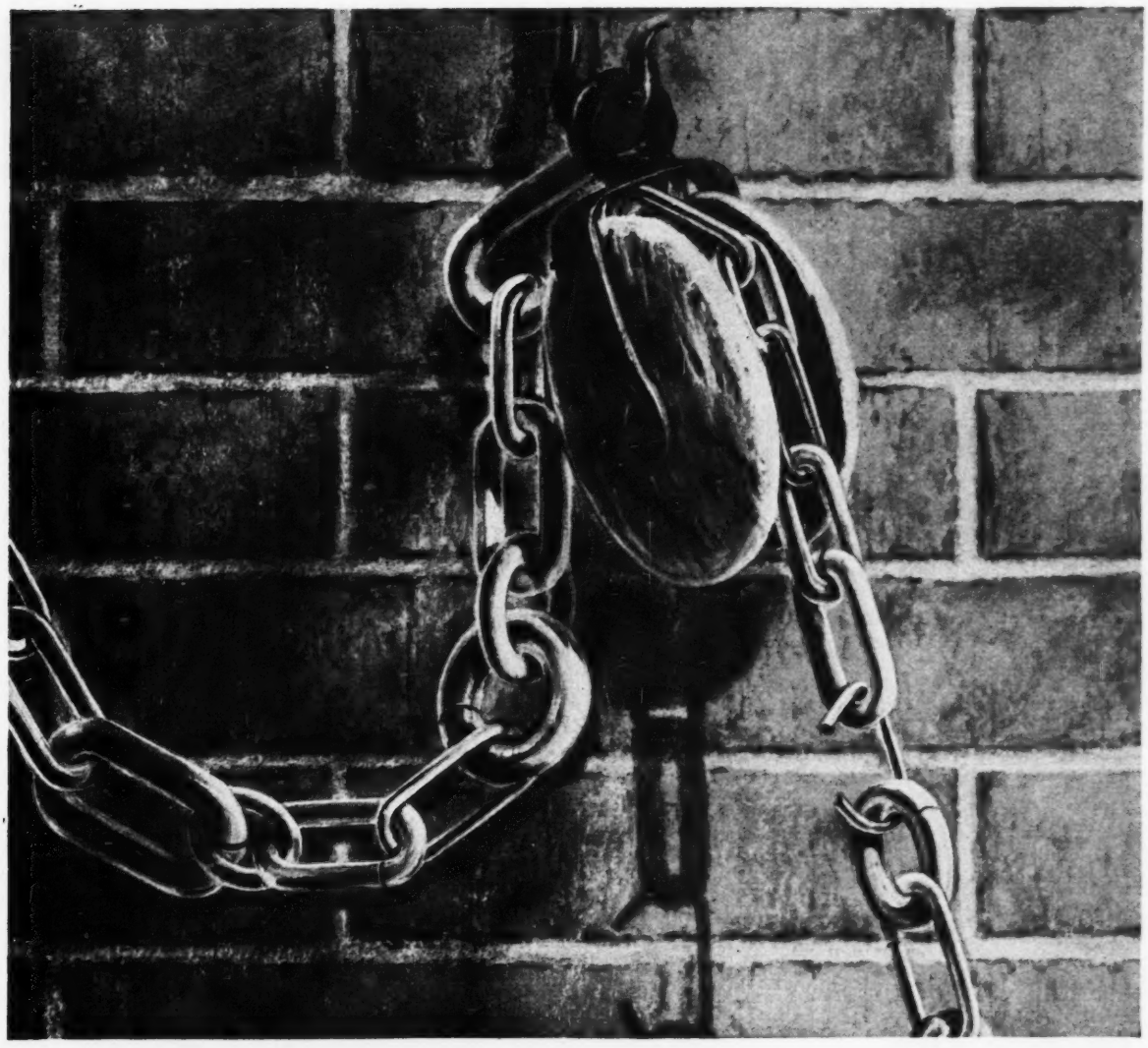

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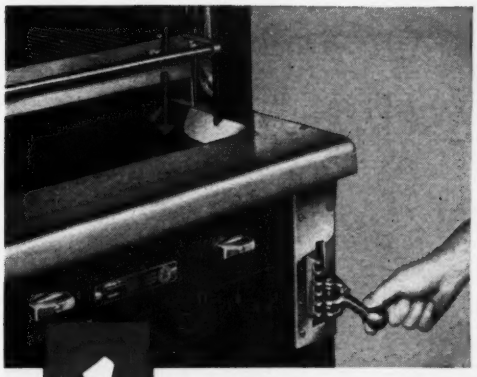

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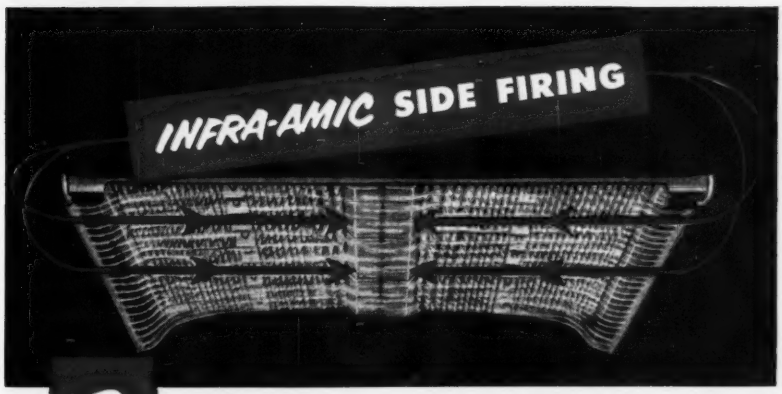

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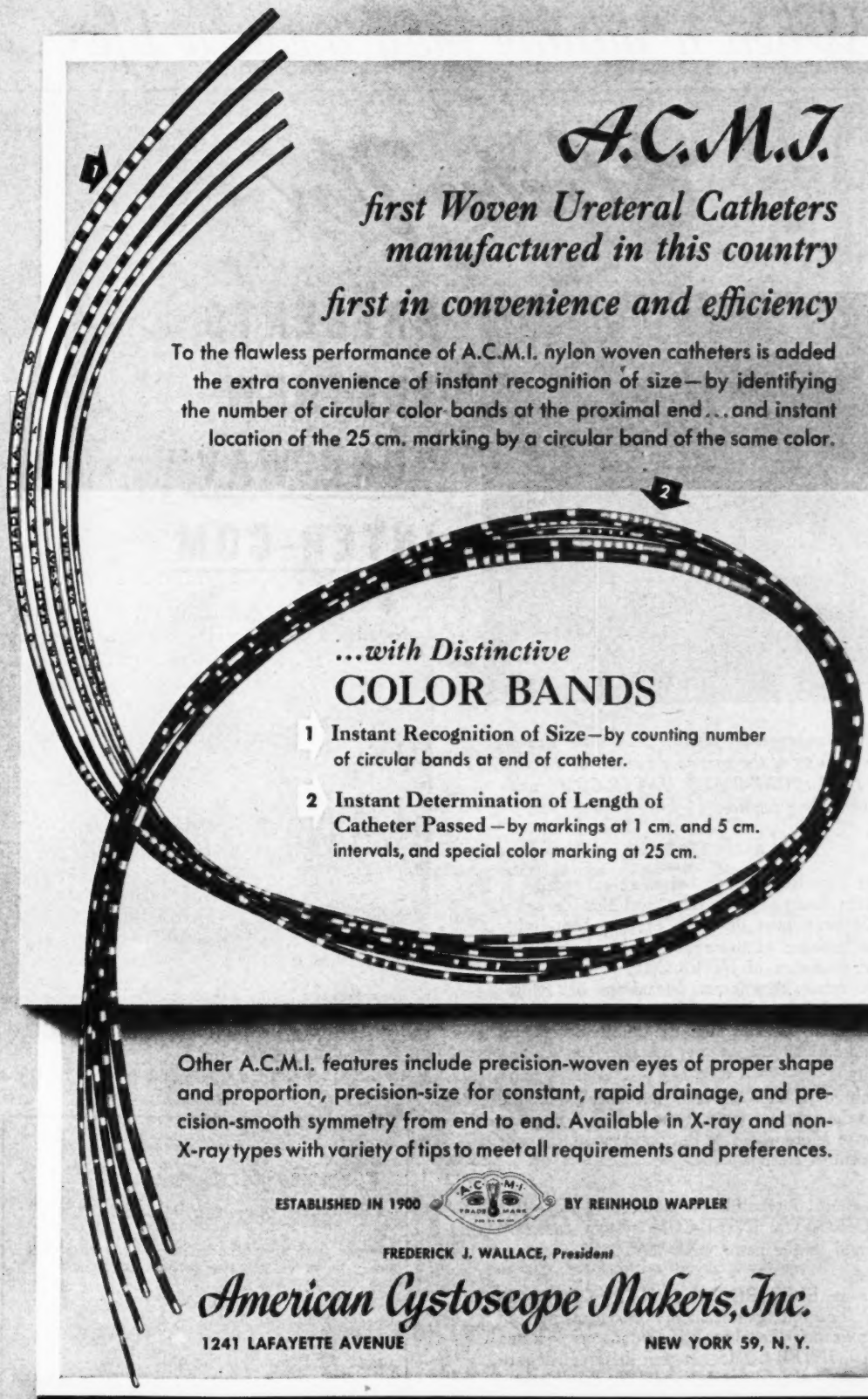

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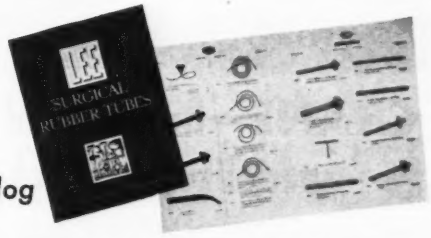

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A. L. Swanson, M.D., Editor

The CANADIAN HOSPITAL

Toronto, May, 1953 Vol. 30 No. 5

Obiter Dicta

Educational Opportunities

Attention: Administrators and Trustees

SPRING hardly seems to be the time to consider new educational programs. Schools traditionally commence in the fall and, in the spring-time, we start to think of vacation and seeing new places. But, despite the pull towards holiday thoughts, now is the time to plan ahead on your educational program.

Educational activity in our present-day hospitals is assuming greater importance as the complexity of our operations increases. From formal post-graduate courses down to short institutes, education is available in some form to every level of staff. If we wish to keep our hospitals abreast of changing concepts, we must educate—from the administrator to the ward maid. What is more, hospital education is a continuous process, and will remain so, particularly while rapid progress is being made in medical and hospital care.

The Canadian Hospital Council is proud to take part in many regional hospital meetings and institutes, on various hospital topics, across the country. Where time and finances permit, the directors and executive staff are anxious to assist the local organizations in planning and presenting educational programs. In addition, the Council is active in sponsoring a national educational program, which consists of two extension courses, and takes part in the University of Toronto course in hospital administration.

From the number of applications received, it is evident that the extension course in hospital organization and management has become a part of the educational program of many hospitals. The new extension course in medical records, sponsored jointly by the Canadian Association of Medical Record Librarians and the Canadian Hospital Council, will commence in September, 1953. It is very young yet but it is anticipated that this new educational venture will also find wide support in the hospital field.

As the accreditation program for hospitals has developed over the years, more and more stress has been laid on the importance of good hospital records. Have your medical record personnel been considered for their share of the educational opportunities offered by your hospital? In addition to passive permission, do you give your positive support, financial and otherwise, to chosen staff members as they seek further training which benefits your hospital as well as the individual? The board of trustees, through its executive officer, is responsible for the quality of care offered in the hospital. What better insurance can we offer our community than to provide educational and training opportunities for our staff?

The supply of trained medical record librarians is very low in Canada. Excellent schools exist at several Canadian hospitals* but many medical record personnel cannot spare the time or money to attend for one full year. For the young person starting out or for any individual with financial backing there is no substitute for formal training. However, many in the field lack the assets of youth and/or capital. The extension course in medical records is designed to offer full training over a two-year period, while permitting the student to continue her employment in a medical record department except for a one-month intramural session at the conclusion of each academic year.

It is hoped that this course will help to eliminate the backlog of persons seeking training in medical records and that eventually formal training will be available to

**St. Boniface Hospital, St. Boniface, Man.; St. Michael's Hospital, Toronto, Ont.; St. Joseph's Hospital, Peterborough, Ont.; Hotel Dieu Hospital, Kingston, Ont.; Hôtel-Dieu, Montreal, P.Q.; and the Halifax Infirmary, Halifax, N.S.*

all in hospital schools. Your medical records personnel will be interested in this opportunity. Will you support them? Lay your plans in May to take advantage of the educational programs commencing in September. Brochures and application forms are available, on request, from the Secretary, Committee on Education, Department "E", Canadian Hospital Council, 280 Bloor St. W., Toronto 5.

At Westminster Abbey

TO most of us June 2nd, 1953, will hold a very special significance; for on that day the woman we have watched with interest since babyhood will be crowned Queen Elizabeth II. We have been able, through radio, newsreel, the press, and her own official visit in 1951, to follow her progress, as a child and young woman, to marriage and motherhood. Last year, she ascended the throne as head of our mighty Commonwealth of Nations. In times of world tension and threats of war, her life, as depicted for us, has ever exemplified high ideals and a tradition of service. She has given to use also a touch of fairytale romance and a revival of historic pageantry in its full glory.

Although modern means of communication will bring the coronation close, comparatively few will have the opportunity of actually attending the ceremonies. However, Canadian hospitals were invited to send a representative to Westminster Abbey and Mr. J. B. Winslow of Woodstock, N.B. will be present in that capacity.

Late in March; the Secretary of State advised that the Canadian Hospital Council would have the privilege of appointing an official representative. Letters requesting nominations were sent out immediately to all member organizations; and, from among the names submitted, Dr. O. C. Trainor, president of the Canadian Hospital Council, appointed Mr. Winslow.

Mr. Winslow is a past chairman of the New Brunswick section of the Maritime Hospital Association, is chairman of the board of Carleton Memorial Hospital, Woodstock, and has long been associated with hospital work in Canada. He and Mrs. Winslow will carry with them the best wishes of all hospital people—as our representatives at this splendid ceremony.

How About Your Hospital Personality?

EFFICIENCY in many forms is continually being taught and practised in our modern hospitals. Streamlined admitting procedures, early ambulation, regionalization and centralization are only a few of our methods as we strive for better care, in less time, for more patients.

Meeting the budget and the fear of red ink haunt the conscientious hospital executive, in the face of public demand for the best care that science can offer. Today the "best" involves newer x-ray machines, larger laboratories, specialized staff and costly equipment on a scale that was undreamed of only a few years ago. Grumble though he may at cost, Mr. Public expects this level of care. He does not come to hospital hoping to get well, he comes expecting to be cured. Thus, with increased efficiency, the trustee and administrator face the paradox of a public that expects the best but protests the cost.

Make no mistake—the situation is here to stay, so long as medical science continues to forge ahead. We would not stop this progress if we could, even though it hurts to replace an expensive piece of equipment that has become obsolete long before its time. We must have efficiency, we must be quick, we must be sure.

Over and above these qualities, we must have constant consideration for the patient as a person. The knowledge that every modern facility for his welfare is at hand will comfort him. Nonetheless nothing is quite so helpful to the patient's troubled mind as proper, sympathetic understanding of his personal worry and fear.

From the moment he enters our doors the patient finds himself in strange (and frightening) surroundings. Alert employees ask carefully selected admitting questions; through gleaming corridors he is speedily conducted to a room; crisp technicians approach with needles; x-ray machines make buzzing noises; doctors, interns, and nurses, come and go. So many people—admittedly all specialists—but also, in most cases, all strangers. If they have smiled at all, it has been of the hurried mechanical sort worth little in giving confidence.

All these factors are present in hospitals and in large hospitals it is especially difficult to combat the coldly impersonal approach. Can we remember to interject more kindness? It will not take the place of skill but a frightened patient is more prone to shock, a worried patient is tense and unrelaxed. A little explanation, a few words of reassurance, will add up to much from our customer's point of view. What is your hospital personality rating?

Do Per Diem Costs Tell All?

THE most real and significant formula by which to judge the economic efficiency of a hospital is the cost per illness per hospital patient. The popular use of the average daily per capita cost to depict the cost of hospital care is more misleading than helpful. A hospital can increase its daily per capita cost as a result of an increase in efficiency and it can lower it as a result of a decrease in efficiency.

To illustrate: No two hospital patients ever cost the same amount and no two days cost the same. The first few days in hospital are always much more expensive. In a 12-day stay in a $14-a-day hospital, the cost of the first three days will be an approximate average of $78 for a typical surgery patient. The remaining nine days will cost from a high of $15 per day and will get progressively lower to about $6 a day as special services and special attention become less necessary.

If it were possible to discharge the patient in 11 days instead of 12, the hospital would save $6. The result would be to increase the $14 a day to $14.73.

On the other hand, if the patient stayed 14 days instead of 12, the per capita cost would be lowered to $12.86 per day.

Please read the first paragraph again—*Percy Ward.*

Ed. Note: This whole editorial demands careful study.

Medical Records—

their intrinsic worth

Lawrence E. Ranta, M.D., D.P.H.
Assistant Director, Medical,
Vancouver General Hospital,
Vancouver, B.C.

IN the medical records department of the Vancouver General Hospital, there are 45 tons of paper on one mile of shelving. All of this records the work of more than 1,000 doctors who have cared for nearly 740,000 patients since 1905. It represents an aggregate of at least 30,000 years of modern medical experience over the past 50 years.

Of these records it might be said, as Horace Smith said of a library: "What laborious days, what watchings by the midnight lamp, what rackings of the brain, what hopes and fears, what long lives of laborious study, are here sublimized and condensed into the narrow compass of these shelves."

Here, then, is recorded 20th century medicine—with all its brilliance, its successes, its patterns, its mediocrities, its failures, and its derelictions.

Recently, we called a waste paper trading company and, rather reluctantly, they offered us $180 for the lot. So, there is the commercial value of 45 tons of laborious days, watchings by midnight, racking of brain, hopes and fears, and lives of study—$180 for 45 tons of original manuscripts.

The purpose of this paper is to emphasize that medical records have more than commercial value. Their intrinsic worth to the doctor, his patient, and to the hospital, gives them inestimable values couched in terms of assurance and insurance, peace of mind, and increased standards of medical service.

In line with the policies of other hospitals and with the growing attitude of medical librarians, the old medical records of this hospital are being destroyed. As it has become increasingly evident that charts older than 25 years are rarely consulted and, when consulted, are of little value, the records for the years prior to 1927 have been discarded. The traditional feeling that medical records should be preserved permanently has been wearing thin, while the destruction of useless records has given a practical solution to what was a nightmarish dilemma.

Storage

In recent years, while the value of medical records has been growing more apparent, their size has increased correspondingly. Today, at this hospital, medical records encroach on new shelving space at the rate of 31 inches per day. In a year, this represents ten tons of paper for storage. If the bulk of records persists (and it actually promises to increase), by 1975 an active storage file for 250 tons will be required. Ten years from now, it will be necessary to add two miles of shelving and later, provide another two miles. This will come about, unless someone brilliantly invents a practicable solution to the problem of bulk storage with maximum accessibility. Thus far, microfilming and microcarding still create problems for the large medical centre.

Medical record services have had difficulty over the years, in impressing their predictable needs upon hospital designers and managements. It is now more clearly recognized that in the planning of hospitals there must be provided double-purpose space which is usable for some short-term purpose pending the necessity of assigning the space to the medical records department. Nevertheless, in some hospitals, passive resistance to the claims of the medical records department to full partnership in the effective operating role of the hospital prevents the record service from standing on an equal footing with the laboratory and the x-ray service, in its claim for adequate space. With the development of the concept that records may be destroyed after 25 years of storage, there is at least some end seen to rapid and perpetual expansion. Previously, the problem of record expansion had only a ludicrous limit, for the accumulation of records would diminish to a tolerable degree when records so encroached upon bed space that fewer and fewer patients could be admitted to hospital.

The retention of only the immediate past 25 years of records points up another important concept: a medical record library is not to be classified as an archives. Case histories are not retained for museum purposes. In other words, preservation should be established only for those charts that can justify their value in one way or another.

Legal Value

From the viewpoint of the hospital as a corporate body, the medical record of an adult patient ceases to be useful to the management of a hospital in British Columbia 366 days following discharge. The Hospital Act of British Columbia so stipulates that legal action against a hospital may not be initiated following this statutory limit. Other acts indicate that certain exemptions apply to the cases of minors and persons incarcerated in mental institutions or prisons.

Also, from the viewpoint of hospital charges, the value of the record ceases when certain information has been gathered from the chart immediately after the patient is discharged. When the account has been paid, the chart ceases to be of monetary value to the hospital.

If a hospital were to store only those records that were needed to protect its legal interests, the amount of space and staff required for storing and handling the records could be reduced substantially. In this hospital, for example, not more than 15 tons of records would need to be stored. This would adequately provide the physician with records for legal purposes, since the Medical Act places a limitation of one year for bringing suit against a doctor for malpractice.

The legal aspect of medical records cannot be over-emphasized, for times have obviously changed since 1773 when a young, and undoubtedly beautiful Polish princess lost her life when her surgeon in bleeding her used his

Presented at a staff clinical meeting, Vancouver General Hospital, Vancouver, B.C., November 5, 1952.

lancet so clumsily that he slashed an artery. In her will, made on her deathbed, no ugly marks of criticism appeared. Fever, love, anoxaemia or Christian charity, dictated the following sentiments:

"Convinced on the injury that my unfortunate accident will occasion to the unhappy surgeon who is the cause of my death, I bequeath to him a life annunity of 200 ducats, secured by my estate, and forgive his mistake from my heart. I wish this may indemnify him for the discredit which my sorrowful catastrophe will bring upon him."

Somewhat different is the tenor of our times. Certainly, the importance of a good medical record is a definite advantage in strengthening a doctor's or a hospital's defence. Without it, the doctor and the hospital could easily become the victims of any person who wishes to claim damages for even an imagined fault. Under these circumstances, the medical record becomes a part of the legal memory of the physician and the hospital. To be sure, from the medical point of view, this is only an incidental value of the chart, but it can be a real source of solace to the defendant.

In this hospital, as in others, the Board of Trustees is the owner and custodian of the medical records. As they are written, the records become the property of the hospital. They must be protected under ordinary circumstances so that private information is not revealed to unauthorized persons and, if litigation is threatened, special protection must be given them.

When legal action of any type is even rumoured between the patient and the hospital, the patient and his doctor, or the patient and some other person involved in the patient's illness, the records are immediately placed into special custody and access to them is barred. An enquiry from a lawyer, perhaps even an innocent one, immediately results in additional protection of the chart's contents. Except for their use in aiding the medical care and welfare of the patient and in research, medical records may be revealed only upon Court Order or in court upon subpoena *duce tecum*.

But what has all this to do with the doctor? When the chart goes into special custody, it is too late to record a consulation, make a pertinent observation, or add a series of progress notes.

In an age when many people are all too aware of the basic vulnerability of the physician, and of his disinclination to undertake endless litigation, some are willing to open proceedings in the hope of a settlement. If the matter comes to trial, an incomplete record or one in which an alteration has not been initialed and dated may in the least prove embarrassing, while in the extreme it may lose the physician his status in the community.

Medical Audit

The hospital has, or it must inevitably develop, another interest in medical records. In this interest, it again closely parallels the physician's interest.

The managing board of a hospital is responsible for the appointment of physicians to the staff of the hospital. Doing so, the board assumes a certain degree of responsibility for the professional practice of each physician on the staff. If the board is irresponsible in its appointments, it may be called upon to defend itself in the court of public opinion.

In the appointment of a physician to the staff, the managing board traditionally depends upon the advice and recommendation of the medical board or similar group of attending doctors already on the hospital's staff. When a young doctor has finished his internship and applies for visiting staff privileges, what protection should the hospital provide his patients? Are his cases to be reviewed casually? Are his cases to be reviewed only when he runs into difficulty? Has the hospital any responsibility to review his cases at all? These are questions that have vexed hospital administration for a long time; but a definite answer is given by the application of the medical audit.

As the quality of medical care rendered by the individual doctor determines the quality of care credited to the medical staff of the hospital, the care given by the individual physician is of personal concern to each doctor on the staff and to the hospital as an institution. In assessing the quality of care given by the individual doctor, the medical record presents a complete picture.

The medical record is, in this sense, of great value to the hospital. It indicates whether the efforts of the doctor, using the facilities provided by the hospital, successfully cared for the patient according to the reasonable expectations of modern scientific medicine.

To this end, the hospital administration or the medical staff may establish a medical audit system for the analysis of the records of patients discharged from the hospital. This may be started by the engagement of an independent medical auditor, by the formation of a group of medical auditors in each professional sphere, or by the appointment of an audit committee responsible for all of the auditing. The medical audit may be carried out on the basis of examining the records of all patients discharged or a representative sample of the records of each doctor may be reviewed. In any event, an objective evaluation of the quality of medical care given a patient points the way to an elevation of medical standards in the hospital.

To establish a medical audit requires the co-operation of the whole medical staff. Moreover, it must be recognized that, sooner or later, the annual reappointment to the staff and the privileges offered to the staff member must begin to depend upon the results of the medical audit. But the conscientious doctor has nothing to fear from the medical audit. On the other hand, the person who treads the lower borders of good medicine finds that his privileges are made to fit his temperament. Fortunately, such persons are so rare among medical men that the audit is both prac-

(Concluded on page 78)

A reminder—

Extension Course in Medical Records

Applications continue to be received for the extension course for the training of medical record librarians. (See *The Canadian Hospital*, February, 1953, pp. 31, 40, 41.) Six weeks only remain in which to file *your* application. Full information and application forms are available upon request from:

The Secretary,
Committee on Education,
Canadian Hospital Council,
280 Bloor Street West,
Toronto 5, Ontario.

God Save the Queen

One hospital's system for

Controlling Linen

W. H. Shea,
Laundry Manager,
Toronto General Hospital,
Toronto, Ont.

INVARIABLY, the control of linen in a hospital presents a major problem. While we in our hospital do not consider that we have fully overcome the many obstacles involved in linen control, we have, with limited facilities, endeavoured to put into effect a system which has resulted from the combined efforts and co-operation of management and those vitally concerned with the use of linen in all its forms.

The inauguration of any system usually demands a great deal of forethought and one of the first steps is the selection of a committee capable of carrying through to the end all decisions approved by this group. The first duty confronting the committee which, at commencement, consisted of the superintendent of the hospital, superintendent of nurses, and the laundry manager, was to determine the responsibility for the following major points:

(a) The formation and extension of the existing committee with the authority to complete all details pertaining to linen requirements throughout the hospital.

(b) Assigning to a member of the committee the responsibility for requisitioning any new linen requirements approved by the committee which may be deemed necessary to ensure the success of the system.

(c) Assigning to a member the responsibility for all linen repairs, with the authority to discard unusable linen.

(d) Obtaining the co-operation of all supervisors or head nurses of the floors, wards, or operating rooms, in respect to requirements, distribution, and consumption of clean linens.

(e) Obtaining the co-operation of those concerned with the immediate forwarding to the laundry of all soiled linen as soon as possible after use in the wards, floors, or operating rooms.

The latter was deemed essential to eliminate any congestion of linens at one place and to assure a constant flow of linens. It was the committee's opinion that each ward or unit should have its respective quota for a 24-hour period, early each morning. To assure that this supply was available at the proper time, it was essential that the quota be filled the previous day. To accomplish this, each unit was provided with the following equipment and instructions were issued to the supervisors or head nurses as to its use.

How the System Works

Each floor, ward, or unit was provided with two metal linen cabinets, the size of which was determined by the number of beds in the unit and the amount of linen previously approved by the committee as being adequate. Each cabinet was designed to hold enough linen for a 24-hour period and equipped with shelves, double doors, and locks. The linen supply department was provided with a complete list of linen requirements for each unit covering a 24-hour period, and this department controlled the keys of each cabinet.

Prior to the inauguration of this system, each cabinet was stocked with a full quota of linen to cover a 24-hour period. At 7.30 a.m. of the day the system began, cabinet No. 1 was unlocked by a linen maid and the contents placed under the control of the supervisor or head nurse of the particular unit. At 7.30 a.m. of the second day, the system was enforced. Cabinet No. 2 was unlocked and made available to the supervisor or head nurse and an inventory was taken of the remaining stock in cabinet No. 1. This cabinet was then locked, its quota replenished during the day and made ready for use the next morning.

This system has definitely provided a control of linen. For example, if the unit is not operating to capacity, there should be a decided decrease in the amount of linen required to complete this quota. If this decrease does not present itself immediately, a thorough comparison may be made from the records of issuance by comparing the daily census with the linen replaced to complete the quota.

In our opinion, one of the major factors in the control of linen has been the locking and unlocking of the cabinets at the proper times, with the keys being controlled by the linen department. A supervisor or head nurse of the unit is assured of her supply for that day and is further assured that at the commencement of duties the following morning she will have available her total quota for the following period. A system of maintaining one locked cabinet at all times prevents the hoarding or use of linen by unauthorized parties in excess of requirements.

This method of control does not mean that any ward or unit would be short of linens in case of emergencies, as emergency supply cupboards are provided in the linen rooms and this linen can be requisitioned through the nursing office. Such linen used in this manner would automatically find its way back to the linen room, as the cupboards would only be replenished with their original quota.

As previously mentioned, one of the important items of control is the inspection and discarding of linens which may be deemed unfit for further use. Daily, weekly, monthly, (or as each item presents itself) damaged linen which has been set aside should be inspected. Items which are withdrawn from circulation are listed, then new linen requisitioned for replacement. Any damaged, discarded linen which can be salvaged should be put to use. Where possible such items are forwarded to the linen repair or sewing room to be cut down to standard articles.

(Concluded on page 90)

From an address presented at the Ontario Hospital Association convention held in Toronto, Oct., 1952

Remodelling Speeds Laundry Production

John A. Syme,
Purchasing Agent,
Royal Jubilee Hospital,
Victoria, B.C.

AT the Royal Jubilee Hospital in Victoria, B.C., recent changes in the laundry plant have enabled the demands of greater peak loads to be met, without the necessity of an extensive building program. The problem was not a new one, simply that of increased patient load and an inadequate plant. The volume of linen in circulation had increased as the hospital grew from 400 to 500 beds. Like "Topsy", the laundry "just growed"; more machinery had been added through the years, with no increase in floor area.

Traffic or work flow was confused. The floor was dotted with washers, extractors, trucks, et cetera, and workers had to back-track and recross their steps to reach the machines used in their work. There were some 20 pieces of machinery in operation, of which only four had been purchased as new equipment and the balance were from 20 to 30 years old. The plant was driven through flat belt drives and overhead shafting from a steam engine in the power house below, thus sudden shutdowns were not uncommon. Numerous belts with their guards obstructed traffic, to say nothing of the resultant noise and confusion which did not improve employee working conditions.

This was before the advent of province-wide hospital insurance in British Columbia, and the helpful grants-in-aid for new equipment, as well as assistance in planning and building new additions. A new building was not considered feasible and such machinery as was needed had to be financed out of existing capital funds.

Planning

The problem of how to increase laundry output with a minimum of expense was the subject of many discussions involving management, the laundry manager, chief engineer, and maintenance superintendent. Studies were made of modern hospital laundries as well as commercial plants, including those using fully-automatic equipment, such as self-unloading washers and extractors. The initial cost of such equipment prevented the committee from installing this type of machine until the hospital had reached a larger size.

From these studies grew a plan of action: to provide a new and more efficient laundry plant in the space available; to change from steam engine to electric motor drive; and to improve the work flow. The plan also included

The Author

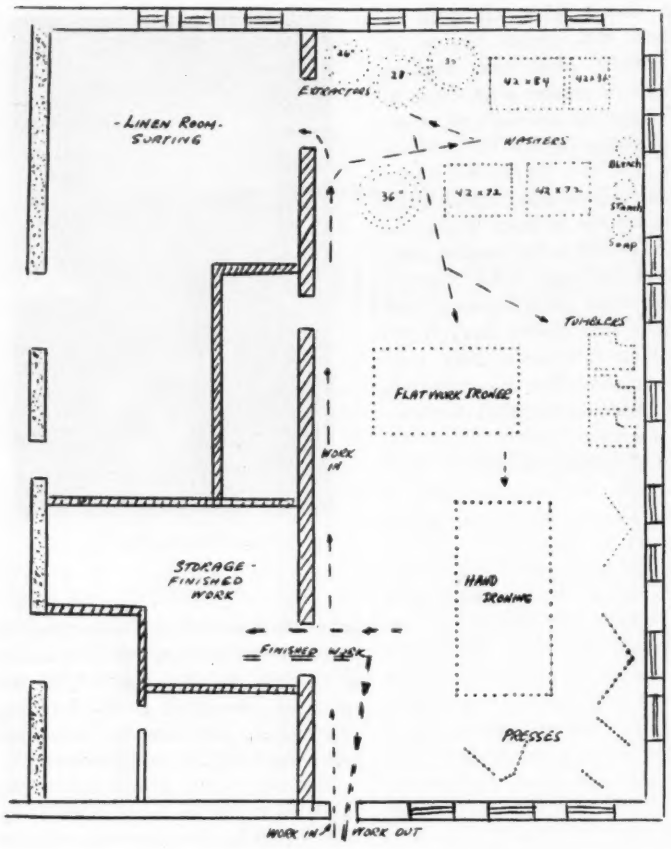
using the hospital staff to accomplish the work and keeping within a budget of $35,000. Of this sum, $4,750 was spent on alterations to the building, new lighting, plumbing, and power services, and $30,150 on machinery.

The entire project took six months to complete, during which time a definite schedule of moves was followed. Certain storage areas were moved to clear the way for new expansion and a limited number of structural changes were made in hollow tile walls, floors, and doorways, to provide a better work place.

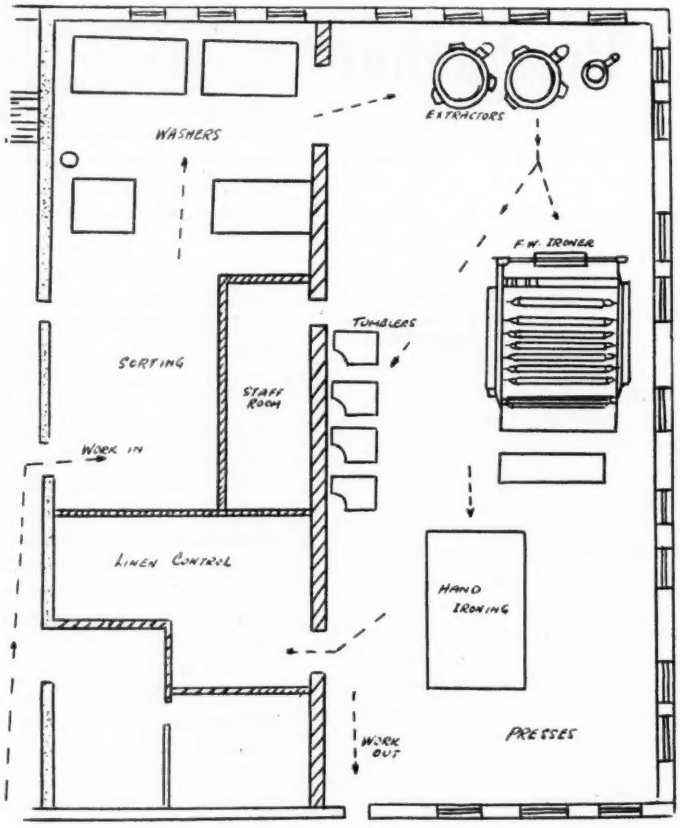
One problem, which had been an annoyance for years, was successfully met and solved by the addition of a new roof. In the old plant, steam from the presses and mangle would condense on the ceiling and then drop down as water on the workers and the linen below. The old roof was torn off the concrete slab and a new built-up asphalt and gravel roof was laid over 1″ insulating board. This solved the moisture problem.

Co-operation

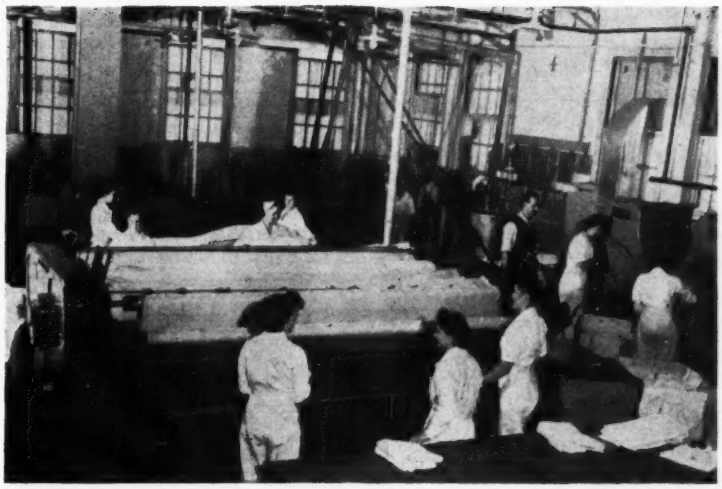
During the alterations, the greatest co-operation existed among all those engaged on the project. Laundry workers had to contend with makeshift hookups of piping to machinery being moved. Maintenance men worked long into the night, as well as on many weekends, to complete the installations. During the final week, when a new 6-roll flatwork ironer was installed, the hospital linen had to be sent out to a com-



Before:
Laundry lay-out before remodelling. Dotted lines indicate where equipment had been originally.

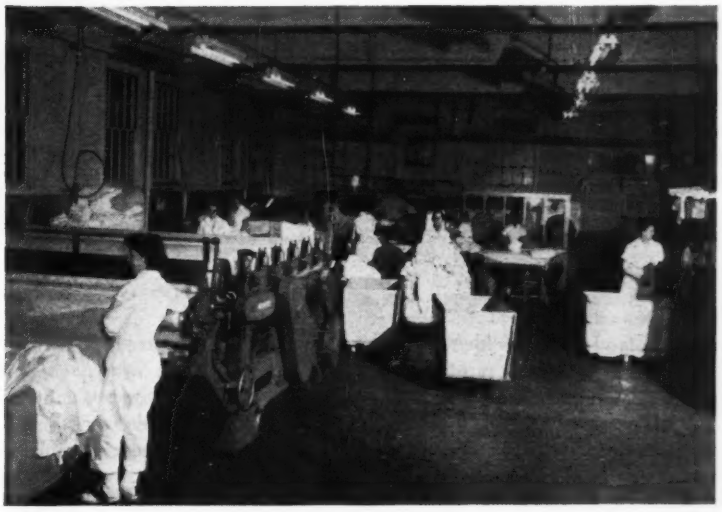


After:
The new laundry set-up, in the same space.



Before:

This shows a crowded corner of laundry, with 4-roll ironer and tumblers, and inadequate lighting.

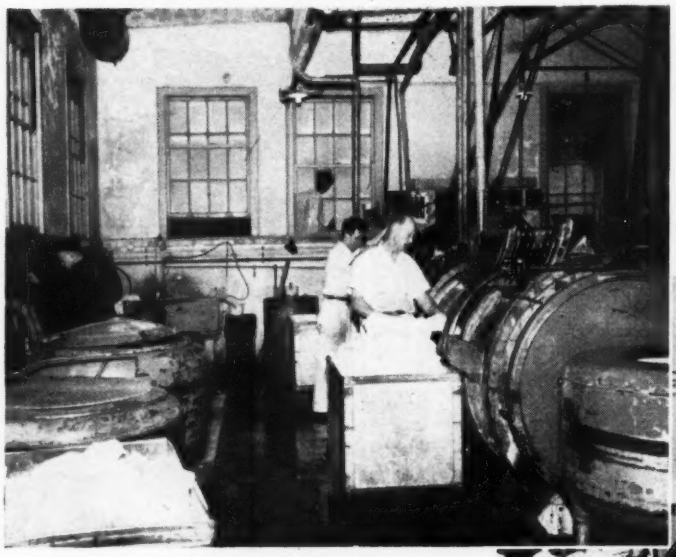


After:

The main plant area, with new 6-roll flatwork ironer in foreground, drying tumblers at right, and ironing and pressing departments at rear. Ceiling is clear of pipes and shafting, lighting is improved, and floor area seems to have doubled.

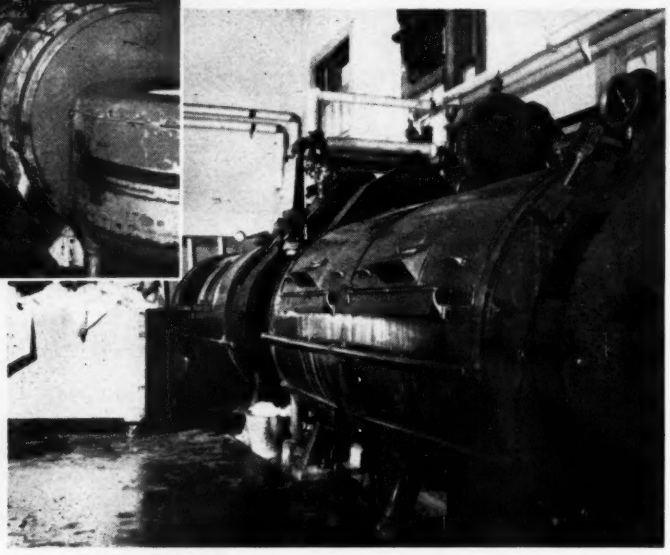
After:

View of corner of plant, after alteration, showing the two 48" extractors and the one 30" extractor. Floor space has been increased and level of illumination is higher.



Before:

This shows the wooden washers, second-hand extractors, maze of overhead piping, pulleys and flat belts; paint is peeling from walls because of excessive condensation.



After:

The 42" x 48" monel metal washer is in the background. Note that the machine in foreground has been modernized by electric motor conversion unit at top, installed by staff mechanics.

mercial laundry. (Incidentally, the bills for linen sent out proved that a hospital laundry is still economically sound.)

The machinery which was installed may be of interest to hospitals of comparable size, *i.e.* 500 beds, with a training school for nurses and technicians, and where graduate uniforms are finished. It is as follows: two monel metal washers, 42" by 84"; one monel metal washer, 42" by 72"; one monel metal washer, 36" by 42"; two extractors, 48"; one extractor, 30"; four drying tumblers, 36" by 30"; one six-roll flatwork ironer, 120"; and ten finishing presses.

With this equipment, the plant is presently able to process an average of 27,000 pounds per week of flatwork, plus 3,000 pounds of starchwork, with a staff of 36 men and women, including delivery men, linen control room, and sewing room workers.

Advantages

The advantages of a modernized laundry are many and may be summarized as follows. There is a noticeable effect on worker morale in a clean and shining plant with good lighting, labour-saving machinery, and freedom from noise. The dangerous flat belt drives are gone and each unit has an independent electric motor. If there is a slack period in production, all machines do not need to be running and consuming energy. With production schedules improved and loss of time through breakdowns almost entirely eliminated, the laundry manager is free to devote more time to correct wash formulae, better linen control, and improved delivery service to the various wards and departments.

A laundry renovation or addition is one of the most interesting projects for a committee to study, as laundry service comes, perhaps, closer to a factory production line than any other hospital service. The American Hospital Association and the American Institute of Laundering have set up minimum and maximum standards for the number of pounds of linen required per patient per day consistent with good bedside care. These are from 9 to 12 pounds per patient. Our hospital is at present processing approximately 9 pounds per patient per day.

When the volume of linen to be handled has been determined, it is then possible to use the specifications for laundry machinery (which are rated in pounds dry weight) and plan the exact type and size of unit required, allowing a safety factor for sudden peak loads plus anticipated growth. In this hospital, the distribution of work going through the machines is 68 per cent flatwork, 22 per cent tumbled, and 10 per cent presswork.

The foregoing has been presented not as a final answer, or even as the best answer, to any hospital laundry problem. Rather, it shows how one hospital, with limited means, was able to get into full production with a minimum of financial outlay for building and equipment. Considerable attention has been paid to "space utilization" at the Royal Jubilee Hospital and this is one of a series of instances where revised planning has improved working conditions and contributed to better patient care.

STARCH

finishing touch for high quality laundry

C. R. Norwood,
Montreal, P.Q.

THE CHIEF aim of keen and progressive laundrymen is to obtain quality results and to maintain volume without increasing cost. This is particularly difficult at present due to the spiralling price of labour and supplies. Accordingly, it is important that all manual operations be reduced to a minimum. This can be accomplished by a standardization of work resulting in a considerable saving of labour. Many hospitals have made progress in this direction by reducing hand finishing to a minimum and in some cases have eliminated it completely. In any event, the elimination of hand starching often results in improved quality and uniformity and consequently wheel sizing is now common practice. It imparts body to the goods. The finish and feel of the fabric is greatly improved. It lays nap and reduces linting. It also makes for better ironing and acts as a protective vehicle in service, aiding materially in the subsequent removal of soil. It cannot be emphasized too strongly that the finest starch in the world will not produce good work by itself. From the standpoint of quality, it is essential that proper attention be given to the starching process. The results should be pleasing to the eye, smooth to the touch and the fabric given a new lease on life.

Even if correct starching methods have been followed, it must be realized that there is no substitute for good washing and that the subsequent processes of bluing, souring and starching are only intended to enhance that quality. If conditions exist that are adverse to good washing, then they are also adverse to good starching. For instance, the use of soft water in the wash formula is of primary importance. Not only is there a considerable saving in soap, but there is the elimination of the resultant soap curd deposit on the goods which frequently occurs with the use of hard water. This deposit on the threads of the fabric produces a harshness and grayness which impedes the proper penetration of starch. Where starch work is involved, the residual alkalinity caused by the use of hard water in washing or preparation of the starch has a definite tendency to cause yellowing, particularly if the water contains an appreciable amount of iron. This can also occur when soft water is used due to the residual alkalinity left in the goods from the wash formula after improper rinsing, particularly if souring is omitted.

Proper extraction is also important for, if the load is not sufficiently extracted, there is not only a loss in production but an increased tendency for the goods to stick to the press and even scorch. On the other hand, if the work is over-extracted, there is not enough moisture left in the goods to set the starch properly, resulting in a rough finish. Starch work should not be allowed to stand exposed to the air after extraction but should be well covered with dampened cotton sheeting or netting. Nylon nets are not satisfactory for this purpose as they do not hold moisture. Uniform moisture ensures uniform work. The final finish is greatly dependent on the condition of the presses. They should be in good mechanical order and operated at the proper temperature and air pressure as recommended by the manufacturer. The press-heads should be kept scrupulously clean and the cover cloths changed frequently. Finished starch work should not be left where there is excessive humidity as starch absorbs moisture, causing limp and wilted work. Accordingly, it should be moved to the linen room as soon as possible.

Proper Starch Selection

From the above, it can be seen that the starching procedure is affected by many factors other than the starch itself. The choice of starch for any particular hospital will depend a great deal on the type of equipment available. At this point it is well to emphasize that starch should not be purchased merely on a price basis, as lower price starches can often prove more expensive in the long run. There is generally a very low percentage of saving involved as starch costs usually average below three per cent of the total supply cost. It requires only a few hours of wasted labour to more than offset any initial saving, to say nothing of the delay and trouble involved.

Although there are many brands of laundry starch on the market today, they may, with a few exceptions, be divided into four main classifications which are as follows:

1. "Thin-boiling", non-congealing blended starches—for all types of starch work where quality, flexibility and fine finish are desired.

2. "Thin-boiling" unblended starches—for all types of starch work when it is desired to emphasize a single characteristic. For instance, a "thin-boiling" all corn starch is used extensively in coastal areas where the relatively high humidity requires a starch possessing considerable stiffening power.

3. "Thick-boiling" blended starches — quality starch for all sizing purposes.

4. "Thick-boiling" unblended starches — for sizing work where finish and feel is not the main factor.

In laundry practice "thin-boiling" starches may be distinguished from "thick-boiling" starches in this manner: standard laundry concentrations for "thin-boiling" starches range from twelve to sixteen ounces to the finished gallon, while the range for "thick-boiling" starches is from four to eight ounces to the finished gallon; it is practically impossible to cook properly a "thick-boiling" starch more than eight ounces to the gallon, whereas a "thin-boiling" starch cooked under twelve ounces to the gallon forms a thin, fluid colloidal solution at 100° Farenheit. All pure starches when prepared in standard laundry concentra-

tions will jell on being allowed to cool to room temperature. In the past this characteristic has been somewhat of a disadvantage as it necessitated keeping the starch solution hot while in use. This resulted in the development of what is known as "non-congealing" starches. These are prepared by adding certain ingredients to the starch which inhibit the tendency of starch solutions to thicken or set. Power laundry starches are produced mainly from corn, wheat or rice. Each of these starches have slightly different working characteristics; corn develops greater stiffness, wheat imparts more pliability and rice gives a whiter or more opaque finish. It is possible, by blending different starches, to obtain a combination of their various properties and, as a result, blends of corn and wheat starches, combining the body of corn and the pliability of the wheat, are in general use at the present time. In Canada, the most popular and largest selling laundry starches are the following two blends of corn and wheat starches: "thin-boiling"—50 per cent corn and 50 per cent wheat starch; and "thick- boiling"—66⅔ per cent corn and 33⅓ per cent wheat starch. A well known and proven brand is your chief guarantee of a quality product.

Preparation

Considerable care is required in the preparation of starch formulae and close attention to the following points will be well repaid. The starch should be weighed, not measured. The steam line should be blown and the condenser drained immediately prior to cooking. A proper suspension of the starch should be assured before turning on the steam and while cooking. Five to ten minutes is sufficient cooking time and is judged from the time the solution thickens, rises in the cooker and then thins out, allowing free boiling to begin. In making a cooked and raw mixture, the raw starch should be suspended in water and the cooked starch cooled to 120° Farenheit (so that you can hold your hand in it comfortably) before the two are mixed together. It is the final and not the initial volume that determines the strength of a given solution. If a surface scum has been allowed to form, it should be removed and the solution stirred and strained before use.

Starch Cookers

The double shell or jacketed cooker, which is heat-retaining, is preferable when the starch is used hot as it eliminates unnecessary re-heating. The single shell cooker is best adapted for the preparation of formulae in which the starch solution is used cold. This type is sometimes equipped with mechanical agitators or cooling coils to enable faster cooling but this is not essential. All cookers should be equipped with a suitable trap and drain line to prevent condensate from entering the cooker. This condensate is often rusty from long standing in the line. Three valves are required—one in the line before it enters the condenser, the second between the condenser and the cooker inlet, and the third in the drain or blow-off line immediately below the condenser. These valves should be placed so as to ensure convenient operation and should be always kept in good working order. Leaky valves cause a great deal of starch trouble and minor parts such as new valve seats are far less expensive than a wasted batch of starch or several lots of badly starched work. Install water line direct to cooker, either by means of a swing pipe or short hose, in such a way as not to interfere with the closing or opening of the cover to the cooker. Double-shell cookers should be examined periodically to make sure all the seams are tight for there have been cases where the insulating material has worked through a spread seam into the starch, causing specks on the finished work. Also instances have occurred, noticeably when cold starch is used, where the starch solution has worked through the seams, soured, then by contact caused the contamination of fresh starch very quickly.

It is often useful in preparing and checking starch formulae to ascertain the volume of starch cookers [Pi (3.1416) x Radius x Radius x Height=Volume]. Example—calculation of gallonage of cooker with an inside diameter of 22 inches and inside height of 30 inches is as follows: 3.1416 x 11" x 11" x 30"=11404 cu. in.

This result is then divided by 231 cu. in. to obtain the measurement in U.S. gallons and by 277 cu. in. for Imperial gallons.

Formulae

Most hospitals' starching requirements can be well filled with the use of a "thick-boiling" ⅔ corn, ⅓ wheat starch. The starch may be used raw when the work is finished on the press; but cooked starch is preferable as it distributes itself more uniformly throughout the load and produces a better feel and smoother finish. In those areas where the humidity is relatively high and particularly stiff starch work is desirable, a "thick-boiling" all corn starch may prove more practical and economical. "Thick-boiling" starches should not be prepared in concentrations exceeding eight ounces to the finished gallon. In heavier concentrations the starch solution becomes so thick and viscous that it is impossible to assure uniform cooking, resulting in highlights and excessive sticking. Even when using the recommended concentration, the solution should be kept fairly hot, for there is a tendency to thicken, and even set, on cooling to room temperatures. This difficulty is generally avoided by the use of a heat retaining cooker and by making only a sufficient amount for one day's requirements. Another method is to keep the steam line to the cooker slightly cracked. But, if this procedure is used to excess, the steam condensate will dilute the solution to such a degree that unsatisfactory work will be the result. In actual practice six ounce strength is preferable for "thick-boiling" starches (refer to table of starch concentrations for amount of starch necessary for any given gallonage). Follow the procedure as outlined in the paragraph on preparation and, when the cooking is completed, if

(Continued on page 74)

Table of Starch Concentrations in Ounces per Gallon

	"Thick Boiling" Starches				"Thin-Boiling" Starches			
Gallons of Prepared Solution	Six Ounce Strength		Eight Ounce Strength		Twelve Ounce Strength		Fourteen Ounce Strength	
	Lbs.	Ozs.	Lbs.	Ozs.	Lbs.	Ozs.	Lbs.	Ozs.
5	1	14	2	8	3	12	4	6
10	3	12	5	0	7	8	8	12
15	5	10	7	8	11	4	13	2
20	7	8	10	0	15	0	17	8
25	9	6	12	8	18	12	21	14
50	18	12	25	0	37	8	43	12

An Efficient Laundry

contributes to patient welfare

George W. Peacock, M.D.,
Registrar,
College of Physicians and Surgeons of Saskatchewan,
Saskatoon, Sask.

TODAY, hospital care is performed by a team and clean linen in the operating room is just as important and necessary to the patient's recovery as haemostats and Kocher clamps. All departments in the well-functioning hospital must be efficient and this includes the laundry. Poorly washed or finished linen upsets the patient and gives the critical visitor a tangible source of complaint. Nothing upsets a conscientious nurse more than inadequate laundry supplies or poorly finished sheets which irritate the heels, elbows, and natal areas, especially in the senile patient.

Costs

Obviously, we need efficient laundry operation for several important reasons and the cost angle is paramount in the eyes of today's administrator. Linen replacement and the linen inventory are expensive and represent a large part of the budget. In most hospitals we need, as an average, an amount of linen in circulation equal to that sufficient to maintain beds for four times the complete complement— *i.e.*, one set in use, one in the laundry, one set available, and one for emergency. Of course, if we had to, we could do with less but efficient administration more or less demands this amount. The average use per day, per bed, in most hospitals, is about twelve pounds and, if you send your linen to an outside laundry, it would be well to increase your total linen inventory by at least 20 per cent.

If the laundry is not efficient, the cost of operation goes up. Materials are wasted, the life-time of the linen is shortened, and you have a poorly finished product.

A daily work sheet, with a monthly summation for the administrator, is a useful tool in helping him keep his finger on the pulse of his institution. With such a work sheet, comparative figures of cost and production are always available for ready reference and may point out unusual discrepancies which can be investigated and corrected in their incipient stages.

Waste, even in minor quantities, can add up to surprising totals. A pound of soap in excess of the day's needs and valued at 15 cents per pound may lead to an approximate wastage at the season's end of about $45. Add this to the cost of other articles wasted or used in excess of the necessary amount and the total may be a surprisingly high sum which could well have been applied elsewhere.

"Waste of material, time, and money . . ."?

Inexpert purchasing of both laundry materials and linen will also lead to excess costs. These obviously can be checked by keeping adequate information as to prices, records of performance, and other details of use as purchasing guides.

Many supervisors feel that the most expensive part of the laundry to maintain, today, is that area occupied by the hand finishers; and they are planning to reduce this to a minimum and, in some cases, to eliminate totally this part of the production line.

In progressing toward this goal, strenuous objection has been raised by some of our esteemed friends in the nursing profession. However, some hospitals have already adopted the one-piece nurses' apron and more are coming around to this type of uniform every day. The old uniform of bib and bulging apron was obviously designed in the Lillian Russell age and has not kept up with the changes in women's styles. Finishing this type of uniform entails tedious, time-consuming hand ironing, if they are to look at least orderly and well done. Apparently, in many cases, alumnae associations object to changing the uniform for the juniors while, at the same time, they themselves avoid the bulging aprons of their undergraduate days, preferring in their place the plain white figure-flattering clothes they now adopt but deny to others. These old fashioned uniforms waste material, time, and money.

Personnel

Personnel needs of the laundry vary with lay-out, equipment, and line of flow through the building. Proper lay-out increases efficiency and saves the workers both time and energy. The number of personnel also varies with the amount of modern labour-saving equipment. Obsolete machinery should be replaced to save the wages of the workers needed to operate it. The new machinery will soon pay for itself as well as render the laundry a more desirable place in which to work.

An adequate daily record of pounds of laundry produced per day, per worker, if kept, will provide information of value. This record offers figures which may be compared with those of other institutions and may indicate an excess or deficiency of personnel or some other inefficiency. A daily ratio of 300 pounds in an acute general hos-

(Concluded on page 68)

From an address presented at a laundry institute, held in Regina, Oct., 1952, which was sponsored by the Division of Hospital Administration and Standards of the Saskatchewan Department of Public Health.

Water Conditioning for the Hospital Laundry

A. G. White,
Winnipeg, Man.

WATER is the life blood of the washroom and the washroom is the heart of the laundry, whether it is a commercial laundry or in an institution doing its own wash. The first requisite of water for the laundry is that it must be in ample volume to take care of the needs. All water is wet but that does not necessarily make it suitable for washing. Natural water can contain turbidity, colour, taste, odour, hardness, iron and manganese, and free carbon dioxide. Equipment can be supplied to remove any or all of these undesirable characteristics.

Everyone knows the chemical formula for water, *i.e.*, H_2O. Another way of expressing this is H-OH, which is a method of indicating the disassociation of the ions into hydrogen and hydroxyl ions.

Now while the laundry manager must accept the water supply, due consideration should be given to its quality. Quantity does not give value to water but quality does. Laundry managers are primarily concerned with the cost of supplies and the quality of the work, so that hardness is the subject of this article.

The following is a quotation from bulletin No. 36, dated January 1947, published by the National Association of Industrial Laundry Managers: "The importance of having mechanical water softeners in any institutional laundry is emphasized by the reason that few, if any, commercial laundries are without one. In these laundries, the water softener is felt to be as essential as the wash wheel. Also the commercial laundry gets the benefit of having its boiler feed water softened, thereby reducing the cost of water treatment, the reduction of scale on pipes, and an increase in heat and flow rate of water to its machines as a result."

It will be noted that the quotation includes the statements that "the water sofener is felt to be as essential as the wash wheel" and "few if any commercial laundries are without one". Actually, no institutional laundry should be without a water softener as the savings from softened water are more than twice as large as those obtained in a commercial laundry. You may wonder why this is so. The answer is because an institution is laundering its own linens whereas a commercial laundry in laundering someone else's linens. In the commercial laundry, the decreased life of linens caused by washing in hard water is paid for by the customer while in the institution the bill is paid for by the institution itself.

An efficiency engineer employed by a chain of large hotels showed by a careful study of linen replacement costs in one of their hotels before and after installing a water softening plant for a six-grain hardness water that the savings in linen replacement effected by soft water was 27 per cent per year.

Practically all natural waters are hard waters. The hardness varies considerably, so much so that a person living in a town where the water has 30-grain hardness thinks the water in another town is soft when it contains 7 grains per gallon. The words hard and soft are comparative and very loosely used terms. For instance, we hear soft steel and hard wood and comparison on this basis is really ridiculous. Actually water containing one or two grains per gallon is economically softened. Linens washed in this water would show little change in colour in, say, ten washings or so; after that the dingy appearance comes on so gradually it is not noticed until new replacements are added, then the comparison fairly shouts.

Soaps

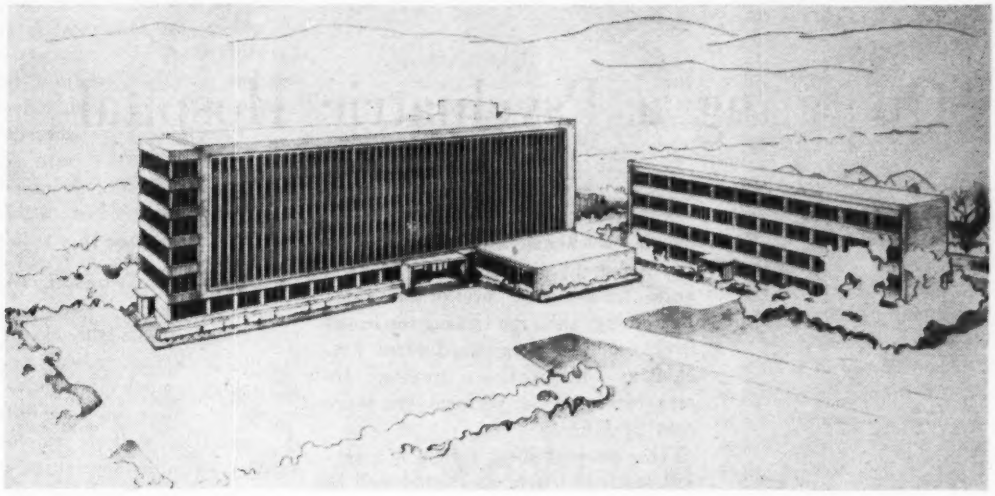
Sodium soaps are made by boiling fats or oils with caustic soda. These are soluble in water and form a suds and are the best cleansing agents known. When hard water comes in contact with soda soap, calcium and magnesium react with the soap to form lime and magnesium soaps, which are insoluble, do not form a suds and exert no cleansing action whatsoever. Of course if an excess of soap is added there will be suds and cleansing action. Unfortunately though, when the work is rinsed in hard water this emulsion is broken and the sticky and soluble soap curd is deposited on the work.

Experiment has shown that 1 grain per gallon in 1,000 gallons of water would destroy 22 ounces of 75 per cent soap and 25 per cent builder and would destroy 28 ounces of 50/50 soap and builder. Thus 1,000 gallons of 10-grain hardness water would waste 14 pounds of 75 per cent soap and builder and 17½ pounds of 50/50 mixture. Of all the water used per day in a laundry, it is estimated that 25 per cent of the total comes in contact with and destroys soap. Thus, while we soften all the water, both hot and cold, the cost of softening all the water is a small fraction of the total saving. For instance, a laundry using a total of 5,000 gallons of 15-grain water would save 33 pounds of soap at 15 cents a pound or $4.95 and the cost of softening all the water would require 34 pounds of salt which would cost approximately 68 cents or a net saving of $4.27 per day.

Water Softener

In addition to wasting soap and decreasing the life of linens washed in it, hard water also causes other troubles. When it is heated, it forms a hard rock-

From an address presented at a laundry institute, sponsored by the Division of Hospital Administration and Standards of the Saskatchewan Department of Public Health, held in Regina, October, 1952.



New Jeffrey Hale's Hospital, Quebec City

The perspective drawing above shows the Jeffrey Hale's Hospital, Quebec City, P.Q., and the nurses' residence to be constructed this year on a new site on the St. Foye Road. The hospital will have a capacity of approximately 149 beds and 31 bassinets but is so designed that all single rooms can be made into double rooms in case of emergency, thus bringing the bed capacity to 188. In case of expansion, all services are designed for a capacity of 200 beds.

The nurses' residence will provide accommodation for 85 nurses with suites for the nursing superintendent and her assistant. There will also be bedrooms for 20 maids. The residence is connected to the hospital by means of an underground passage. Plans for the new hospital have been prepared by Lucien Mainguy, architect; and Neergaard, Agnew, and Craig are the hospital consultants.

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like deposit of scale in steam boilers, water heaters, sterilizers, hot water piping, et cetera, which wastes fuel and increases the costs for labour and repairs. All the difficulties and expenses caused by hard water can be cured by removing the hardness from the water by means of a zeolite water softener. The softener consists of a steel shell containing zeolite supported by graded gravel over an underdrain system. The water to be softened is admitted in the top of the shell and uniformly distributed over the surface of the zeolite bed. In its passage downward, the hardness, *i.e.*, the calcium and magnesium, are removed by the base exchange property of the zeolite. It flows through the supporting gravel bed to the bottom outlet of the softener where it is piped to service under pressure.

When its softening capacity is exhausted, it is taken out of service and regenerated. There are three steps to this regeneration process.

1. There is backwash by reversing the flow of water. This loosens and regrades the zeolite bed, holds it in suspension and removes, by washing up and out, any dirt which may have collected in the softening run.

2. Salting is accomplished by introducing into the softener a definite amount of solution of common salt by means of an injector which is part of the softener. This salt solution is evenly distributed over the top of the zeolite bed and passes downward. As it does so the salt removes the calcium and magnesium in the form of a very soluble chloride. Simultaneously, it restores the zeolite to its original active condition.

3. The third step is the rinse. By this means the calcium and magnesium chloride, plus any excess salt, are washed to the drain by a fairly slow flow of water. After this rinse the softener is then returned to service.

The whole cycle requires from 30 to 40 minutes and, if sufficient storage is available, a single unit is used. However, if storage is not available plants consisting of two or more units are used so that the other units can carry the load while one is off for regeneration.

Water softeners can also be made fully automatic; thus when the capacity of the unit is reached the motorized unit automatically follows out the regeneration cycle. This is done at the correct time and in the proper sequence of operations without the attention of the operator. If not automatic, the time for regeneration might occur when the operator was not available and hard water would be delivered. Also it is possible that a busy operator might try to rush and shorten one of the steps of regeneration which defeats its purpose.

The savings previously mentioned can be yours by installing a water softener. What does your linen replacement cost per year and what would 25 per cent of that amount be to you in dollars per year. Add that to your soap savings and you will have an appreciable amount.

There are other advantages to the use of softened water that benefit hospitals and the usual practice is to: (a) soften all the water, both hot and cold, for the laundry; (b) soften all of the

(Concluded on page 102)

Operating a Psychiatric Hospital

Part II

Arnold L. Swanson, M.D.

The Staff

Standardization

One of the our most pressing and distinctive problems is in achieving definite nursing standards. We all know pretty accurately what is meant by a registered nurse, a licensed physician, a certified specialist or a registered laboratory technician. These and other types of hospital personnel are trained according to definite national and international standards. However, the term "psychiatric nurse" conveys no such definite meaning. Mental health services generally employ registered nurses with a greater or lesser amount of post-graduate psychiatric training. These nurses, almost exclusively women, occupy the supervisory positions but are far too few in numbers to staff the hospitals. Under these supervisors come variously classified and trained nurses, depending on the state or province. Psychiatric nurse, psychiatric aide, nurses' aide and attendant are a few of the common terms. In one hospital a "psychiatric aide" may be relatively well trained, while in another the standard of training for a "psychiatric nurse" may be quite low.

In the United States a psychiatric nurse is usually an R.N. with post-graduate psychiatric nursing training. Other ward personnel are commonly referred to as "aides" or "psychiatric aides". The level of training for the registered psychiatric nurse is relatively fixed by the R.N. training but the "aides" enjoy no such common ground.

In Canada, the provinces also employ the registered psychiatric nurse, more commonly thought of simply as a registered nurse plus some psychiatric training. "Psychiatric nurse" in Canadian parlance roughly corresponds with the "aide" in the U.S.A. However, these psychiatric nurses are usually much better trained than the "aides". In some provinces the mental health services in affiliation with general hospitals actually train registered nurses. In British Columbia, extensive training is given to both male and female psychiatric nurses, producing an extremely efficient and practical nurse, far above the level of the "aide" in training, although lacking the broad background of a registered nurse. Psychiatric aides, with less training, are also employed to perform the more routine duties.

This nurse training system is a very satisfactory method and could well be adopted as a standard, although many other provinces and states could doubtless, also, present good cases for their systems of training. Obviously, standards are required in order that a psychiatric nurse or aide may be employed with confidence and knowledge of exactly what kind of service we are purchasing for our patients.

Personnel Management

Another special staff problem often arises from the lack of a department for personnel management. A suggestion of this service may be found in the paymaster's office or in an employee labeled "nursing counsellor"; but a department as such usually does not exist. Employees are all "civil servants" and thereby come under a Civil Service Commission, a government department usually located in the capital city and seldom having responsible officers at the actual scene of operations. It is hard to imagine an organization of perhaps 1,000 or more employees without this recognized *individual* service, functioning as a part of the local management. Carl D. Rinker, writing in *Hospitals*, February, 1952, describes the organization and activation of a personnel department at Independence State Hospital, Iowa. It is to be hoped that this is the beginning of a popular trend.

Medical Staff

The medical staff is mentioned here not so much because they constitute a special problem but because the organization is vastly different from that in general hospitals. The active staff is more commonly known as the "permanent staff' or "resident staff" and is composed of full-time, salaried physicians. It is a truly closed type of hospital with the medical men naturally taking a much more active interest in the operation and administration. A consulting staff is employed for surgery and other specialties, either on a fee-for-service basis or on a part-time salary. This latter method has gained popularity in British Columbia. It leads to regular visiting as well as special calls and has many other advantages. Visiting, courtesy, and honorary staffs, as they are known in general hospitals, are seldom found.

Part of the staff is composed of young physicians seeking training in the specialty. This group in some ways corresponds to an "associate staff". It is semi-permanent, relatively inexperienced, and constantly rotating. It is with this group of physicians, as well as with interns and all other new staff, that there is some difficulty in orientation in a large hospital. To help overcome this particular difficulty in British Columbia, a "Physician's Manual" has been developed to assist the neophyte through the adjustment period of finding his way about and becoming accustomed to the various medico-legal and special procedures in a mental hospital.

Socio-economic Factors

The treatment of nervous and mental disorders has been going on since the time of Hippocrates. Yet only in recent years have we come to appreciate the magnitude of the problem. Humane treatment in mental hospitals had its beginnings in 1792 when Pinel in France reorganized asylums and attempted to raise the standards of food and cleanliness. Pinel's work has only recently been coming to full fruition as exposés in current magazines and films will attest.

However, the corner has been rounded and most mental hospitals on this continent are now making rapid strides towards better housing, good

(Concluded on page 94)

Health on the World Front

Oliver Leroux, M.D.,
Member of WHO Executive Board, WHO Liaison Officer, Department of National Health and Welfare, Ottawa.

THE years since the end of World War II have seen the greatest effort ever made in the history of the world to eradicate disease and improve the health of mankind, especially in the underdeveloped countries.

A little over five years ago Egypt was struck by cholera. Within a month, the epidemic had spread with such rapidity that on one day 1,000 new cases and 500 deaths were reported. Wholesale inoculations were the only means of checking this disaster, which threatened to engulf the entire Middle East. Of course, there was not enough vaccine, not enough transportation or medical personnel in that part of the world to carry through such a vast campaign. Then the World Health Organization stepped in. Drug houses around the world were urged to speed vaccine production; and 32 tons of medical supplies and equipment were flown to the scene. Twenty nations joined the Egyptian health authorities in combatting the scourge. Within six weeks, the battle had been won and a large part of the world had been saved from possible disaster.

This dramatic victory was achieved because a potential international scourge was fought on an international level. Since WHO believes that the health of all peoples is fundamental to the attainment of peace and security, every day less dramatic but important battles are being fought in all parts of the world.

International co-operation forms the basis on which WHO operates. Today, an epidemic anywhere on the globe endangers all of us. The efforts of WHO to combat malaria in India, tuberculosis in Europe, trachoma in Burma, and sleeping sickness in Africa, help to protect us who live on this continent.

On this continent, the Health League of Canada, since 1919, has accomplished tremendous services for our country by educating the public and supporting governments in their efforts to spend money to prevent diseases. Amongst the accomplishments listed by the Health League of Canada, one statement impressed me greatly. It is the following:

"The efforts of the Health League of Canada have up to now been directed to a recognition of the fact that health is a national objective and that no part of Canada can be healthy if other parts are not."

I would like to enlarge on this statement and say that health is an international objective and that Canada cannot be absolutely healthy if other countries are not. The Health League's appointment by the World Health Organization as a citizens' committee in Canada, to further the understanding of its work, is a proof that international co-operation is of major importance.

The Health League of Canada as a voluntary society must now stand for the principle it has up to now presented so very well to the public, namely: the abolition of the preventable illness, which unchecked, undermines the physical stamina of any country, and compels all citizens of the world to waste their energies, their time, and money, on the attempted cure, instead of prevention. The Health League must disseminate to all Canadians the value of international co-operation in making this a better world in which to live.

Since the inception of WHO, Canada has been vitally interested. A Canadian, Dr. Brock Chisholm, a former deputy minister of my department, was its first director-general, and now, after five very arduous but successful years, is retiring after giving the organization a sound foundation. Distinguished Canadians have represented this country at World Health Assemblies—Dr. W. H. McMillan, M.P. for Welland, Dr. J. T. Phair, Deputy Minister of Health, and Dr. T. C. Routley of the Canadian Medical Association. Now a Canadian occupies a seat on the 18-member executive board.

The World Health Organization, broader in scope and more effective in action than the health agency which functioned under the League of Nations, was first suggested at the San Francisco Conference in 1945. In the following year, WHO's constitution was adopted. Until this had been ratified by 26 nations, the work was handled by an Interim Commission. Finally, on April 7th, 1948, the 26th nation affixed its signature and WHO came into being as a specialized agency within the terms of the United Nations Charter. Canada was third to sign. Each year, in honour of that occasion, April 7th is widely celebrated as World Health Day.

The preamble to the WHO constitution, stating the concepts on which the organization is built, has taken its place as one of the great documents of our day. Indeed its opening declaration—"Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity"—has probably been quoted more often by more public

(Continued on page 84)

An address presented at the 33rd annual meeting of The Health League of Canada, Toronto, March, 1953

Dans les hôpitaux —

La Valeur de l'Intercommunication

Paul-E. Chaput,
Montréal, P.Q.

CE n'est que depuis 15 ans environ que les systèmes spécialisés d'intercommunication préoccupent nos ingénieurs en électronique. Les équipements sonores, qui font le sujet de notre article, appartiennent à la catégorie de ceux qui sont spécialement conçus pour une tâche propre: les constructions hospitalières. Notons ici, en passant, que le Canada est probablement le pays le plus avance au monde dans cette sphère d'activité et que nos ingénieurs et techniciens furent les pionners des applications pratiques d'intercommunication spécialisée, dont aucun hôpital ne saurait maintenant se passer.

Les équipements sonores spécialement conçus pour les immeubles hospitaliers peuvent être assez variés. Nous ne discuterons dans cet article que des types principaux qui rendent chaque jour de précieux services aux administrateurs, médecins, gardes-malades at patients hospitalisés.

L'objet de cet important système d'intercommunication, qui fonctionne conjointement avec le système d'appels lumineux, est de permettre la conversation à voix basse entre la garde-malade et les malades. Il est constitué par un téléphone et un microphone à chaque bout de l'installation et, en outre, d'un haut parleur pour la garde-malade avec jeu de clés correspondant à chaque poste individuel Seule la garde manie les contrôles.

La combinaison d'un tel système à un circuit d'appel par signaux lumineux accroit l'efficacité d'une garde-malade en lui épargnant des courses inutiles. Nombres d'appels, en effet, ne requièrent pas la présence de la garde qui peut y répondre par une courte conversation avec le malade. Lorsque celle-ci est terminée, le signal d'appel se cancele automatiquement.

Un tel système permet à la garde de surveiller de plus près certains malades qui nécessitent une attention particulière, de ménager son temps, ses pas et de se consacrer à d'autres tâches utiles. Il offre également à la garde le singulier avantage de faire sa ronde de nuit sans avoir à se déplacer et sans déranger ses malades. Il lui suffit d'écouter successivement à chaque poste et, en augmentant le volume du haut-parleur, d'entendre la respiration ou les plaintes du malade, comme si elle était à son chevet. Ainsi relié directement à la garde, le malade se sent en confiance parfait puisqu'il reçoit exactement les mêmes soins que s'il avait une garde privée. Cet état de sécurité augmente grandement son moral. Il sait qu'il peut faire connaître instantanément ses besoins avec l'assurance qu'on y répondra aussitôt.

Un signal lumineux relié à l'appareil récepteur du malade assure toute la discrétion possible quand celui-ci répond et s'éteint lorsque le central parle.

Le fonctionnement de ce système se déroule comme suit: le patient signale par un bouton relié à une corde légère et très flexible. Le numéro de la chambre s'illumine au poste d'intercommunication central placé sur le bureau de la garde. Un timbre sonne. La préposée sélecte le numéro lumineux, répond au patient, s'informe de ses besoins. Le signal lumineux peu aussi être cancellé en entrant dans la chambre, ou au lit du patient, si la garde est de passage et ne répond pas du poste central.

Programmes musicaux avec centrale locale

Ce deuxième système de base a pour fonction de transmettre aux malades d'un hôpital, ou au personnel durant ses heures libres, des programmes musicaux ou d'intérêt local. Habituellement, les appareils récepteurs sont, au choix, ou des haut-parleurs au plafond ou latéraux pour les salles communes, dont le type et la puissance sont spécialement calculés pour permettre une diffusion agréable; ou des écouteurs particuliers (écouteurs d'oreiller ou casques) permettant à l'usager de choisir son programme préféré sans risque d'ennuyer son voisin, s'il est dans une chambre à deux lits ou plus, ou d'être ennuyé par lui. Dans chaque cas, il est possible de choisir de un à quatre programmes transmis par la centrale sonore. Un minuscule boîtier, que le malade peut garder dans la main, contient un sélecteur de programmes et un contrôle de volume très faciles à manier.

Les programmes transmis par le poste central peuvent être simultanément radiophoniques enregistrés ou locaux par l'intermédiacre de microphones. Un profane un peu inité peut facilement manier les contrôles du poste central. Aucune connaissance technique n'est requise.

On conçoit les avantages d'un tel système pour divertir les malades par la radioffusion de concerts ou de programmes religieux et éducatifs. Le personnel y trouve une source de distractions qui rendent agréables ses heures libres et accroient l'esprit d'équipe.

Quand aux malades eux-mêmes ils se sentent moins isolés; les journées sont plus courtes et plus gaies, ce qui ne peut manquer d'infleur sur leur moral. Enfin, la programmation et les heures de fonctionnement des appareils étant règlementées par le directeur de l'établissement, ce dernier peut exercer un meilleur contrôle relativement à la discipline d'utilisation.

Localisation des médecins et du personnel

Un autre système qui, à notre humble avis, est indispensable à tout hôpital est celui qui sert à l'appel automatique de la personne. Il comporte un certain nombre de petits hautparelurs à faible puissance disposés aux poste des gardes-malades, aux bureaux des médecins et du personnel en général, dans les salles de repos, les réfec-

(Suite à la page 80)

Cet article est réimprimé de "Architecture—Batiment—Construction," Mars, 1953.

Food and Its Service

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Achieving an Optimal Diet

Margaret McKellar,
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Toronto, Ont.

THE other day, one of my students came to me at the close of the lecture and, after a brief discussion, made this remark: "You know, nutrition is almost like a branch of preventive medicine, isn't it?" And it is! An optimal diet contributes in no small way toward the maintenance of both physical and mental health.

What is an optimal diet? It is one which supplies liberal amounts of the so-called protective foods and, in general, satisfies the appetite without bringing about excessive gain in weight. You notice that I use the word optimal rather than adequate. It is obvious, of course, that even an adequate diet is not possible in all parts of the world but in most sections of this continent an optimal diet is possible even among those with fairly limited incomes. There is a certain income level below which all the knowledge in the world could not purchase even an adequate diet—*i.e.*, one that prevents visible signs of nutritional deficiency. However, by wise selection and preparation of food most Canadians should be able to offer their families the advantages of an optimal diet. These advantages over the merely adequate diet include: increased resistance to infection, greater vitality, general health during growth and development, and particularly during that period of the life span between the ages 30 and 70 when men and women are capable of attaining their highest achievements.

As I stated above, an optimal diet is one containing liberal amounts of those foods popularly known as protective. These include milk, fruits, and vegetables, eggs, meat, fish, and whole grain or enriched cereals. They are the foods which contain comparatively large amounts of protein or minerals or vitamins along with their energy-yielding or caloric value. Today, the protein content of the diet is receiving particular attention. The majority of self-chosen diets, when analyzed, are found to contain about 50 grams of protein. The benefits of including at least 60 to 70 grams are well established. At that level there is increased resistance to infection as evidenced partly by an increase in the rate of production of antibodies. When the protein of the blood plasma is kept at a normal level, not only is there a greater feeling of well-being but, in the event of sudden illness or accident, the chances of a rapid recovery are greater. The therapeutic value of high protein diets, *i.e.*, those containing 100 grams or more, is unquestioned in the treatment of post-operative cases, after severe burn or accident, and during the convalescent period. In a recent study of blood regeneration, following the usual donation of a pint of blood, some interesting facts are revealed. The addition to the diet, following the donation, of a meat patty reinforced with skim milk powder (so that it contributed 40 grams of protein) brought about the most rapid rise in the level of haemoglobin of all the supplements fed. This 40 grams of protein added to the 50 grams present in the self-chosen diet brought the protein to 90 grams. This higher level of protein, although more expensive if the increase were in the form of meat, was found to be even more effective than giving 75 mgs. of iron along with the usual 50 grams of protein. In place of meat, the additional protein could be in the form of skim milk powder. It is just as effective and less expensive.

The protective action of calcium is seen in the decreased tendency toward fracture of calcium-rich bones. With animals, both during the growing period and in the adult stage, the strength and weight of the bones depends on the retention and deposition of calcium. So many factors may interfere with the availability of this mineral that it is said that, even under normal conditions, only about a third of the calcium in the food is actually utilized. If there is a lack of gastric acidity, or an excessive amount of fat in the diet, or any interference with fat absorption as in sprue, then the utilization is still lower. When we realize that there is a continual withdrawal and replacement of calcium in the bones, even after the cessation of growth, it is obvious that the need for this mineral continues throughout the entire life span.

The effectiveness of iron in the prevention of simple nutritional anaemia is well known. The most recently published work on this subject, however, would indicate that the emphasis should be placed not so much on the iron content of the diet as on the adequacy of all the other dietary essentials so that the iron available may be well utilized.

Most of the vitamins contribute in their own way toward building up resistance to infection, vitamin A and ascorbic acid assuming greatest importance in this respect.

Having briefly mentioned the part played by protein, minerals, and vitamins in the maintenance of health, I would like to remind you of the contributions that the protective foods make toward the building up of an optimal diet. Of all the single foods, milk contains the greatest assortment of nutritive substances. The recommended amount of one pint of either whole or homogenized milk supplies 21 grams of protein—an amount equal to that in one average serving of meat

An address presented at the 33rd annual meeting of the Health League of Canada, held in Toronto, March, 1953.

or 30 per cent of the protein for the day. One pint of milk also contributes 72 per cent of the calcium and 67 per cent of the riboflavin for the whole day. If skim milk is used in place of whole milk the contributions of protein, calcium, and riboflavin are all slightly higher. Powdered skim milk when reconstituted supplies these three nutrients to the same extent as the fluid skim milk and at a lower cost. Of the milk products, cheese is one of the most valuable. One slice of cheese, such as in a cheese sandwich, supplies a further 10 per cent of the protein, 20 per cent of the calcium, and 7 per cent of the riboflavin for the day. Therefore, one pint of milk plus one slice or one ounce of cheese would take care of 92 per cent of the calcium, the rest being supplied by an egg, a potato, and another vegetable. So important is milk as a source of calcium and riboflavin that it is practically impossible to have a sufficient quantity of these nutrients without including in the menu at least one pint per person per day.

The protective action of fruits and vegetables is largely due to the ascorbic acid and vitamin A content. One small glass or four ounces of orange juice—fresh, canned or frozen, will supply two-thirds of the day's ascorbic acid, the other third being contributed by a potato and another vegetable. One large orange takes care of the entire amount for the day. It is quite possible of course to have plenty of ascorbic acid without any citrus fruit as long as one includes plenty of cabbage, turnips, tomatoes, potatoes, and other apples or raw fruits; but it is very convenient to take it almost all at once as a glass of orange juice. Vitamin A, which together with ascorbic acid, is one of the many factors contributing toward resistance to infection, occurs in fruits and vegetables in the form of the orange-yellow pigment, carotene. Yellow fruits, such as peaches and apricots, as well as prunes, contain carotene which is transformed into Vitamin A and stored in the liver. Many of the green and yellow vegetables are tremendously rich in this pigment or potential vitamin. One serving of spinach, for example, takes care of the entire vitamin A need for the day with some left over to be stored in the liver for future use. The amount in one serving of spinach is equivalent to the Vitamin A in 3 or the usual type of multiple vitamin pills.

I included eggs among the so-called protective foods. One egg supplies the same amount of protein as does one ounce of cheese—roughly ¼ to ⅓ of that in a serving of meat or fish. One egg also supplies 1/10 of the iron for the day and 1/10 of the vitamin A. The other 9/10 of the iron must come largely from meat, the balance being supplied by that in vegetables and in whole grain or enriched cereals. Meat and fish supply approximately the same amount of protein per serving but fish has only about ¼ as much iron as that in meat. In speaking of the nutritive value of meat one cannot resist mentioning liver. One small piece of liver—only 3 ounces—supplies more than enough vitamin A for the whole day, almost ¼ of the protein, a good ¾ of the iron, all of the riboflavin, and nicotinic acid and, if it is pork liver, ¼ of the day's supply of thiamine. Because of its distinctive flavour and texture, liver is not a meat which can be enjoyed day after day. However, when it is included once a week or even once every two weeks it makes a very fine contribution to the diet.

Although small quantities of thiamine are obtained from fruits and vegetables and meat—especially pork—it is the whole grain and enriched cereals which constitute the most important source of this vitamin. The cereal enrichment program which Newfoundland has enjoyed and which recently has been introduced to the rest of Canada is a great step forward in the protection of the nation's health. Ordinary white bread has so little thiamine left in it that one slice contains only enough to take care of the carbohydrate in that one slice of bread. The enriched product makes a considerable contribution to the thiamine content of the diet as well as giving additional iron, riboflavin, and nicotinic acid. I hope that the public will recognize this fact and insist that all refined cereal products on the market—white bread, cakes, pastry, and others—be made with enriched flour. However, in our enthusiasm for this new improved white bread and flour we must not lose sight of the fact that although enriched bread is vastly superior to unenriched white bread, whole wheat bread is still better. Now that regulations exist concerning the labelling of whole wheat and brown bread, there should be no difficulty in knowing which loaf is the best buy nutritionally—the whole wheat with at least 60 per cent whole wheat flour. There is considerable evidence to show that the proportion existing among the factors of the vitamin B complex is

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Montreal Hospital Council Conducts Institute on Hospital Maintenance

In response to numerous requests, the Montreal Hospital Council is conducting a three-day institute on hospital maintenance, commencing June 3rd, at the Windsor Hotel, Montreal. Sessions will include talks and discussions on techniques and problems of the maintenance department. Attention will be given to the functions of this department in relation to other hospital departments. The faculty will include outstanding architects and engineers; and the curriculum will be based on *The Manual of Hospital Maintenance* published by the American Hospital Association. All lectures and discussions will be in English.

Eligible to attend are: administrators, assistant administrators, and members of the hospital staff whose duties relate to building maintenance or the mechanical services. The fee is $25. Application forms and further information can be obtained from A. H. Westbury, Executive Director, Montreal General Hospital, 60 Dorchester St. E., Montreal 18, P.Q.

Officers Elected for Districts 1 and 2 of O.H.A.

The annual regional hospital conference of districts 1 and 2 of the Ontario Hospital Association was held in Chatham, in April. Districts 1 and 2 cover the area bounded by Brantford, Guelph, Simcoe, Windsor, Leamington, and Seaforth. Some 190 delegates attended the day-long conference and elected Jack L. Bateman, superintendent of the Stratford General Hosptal, president. Other officers elected were: first vice-president, Sr. St. Elizabeth, St. Joseph's Hospital, Sarnia; second vice-president, Robert Buckner, Metropolitan Hospital, Windsor; and secretary-treasurer, Valeria T. Drope, Reg.N., Scott Memorial Hospital, Seaforth. ●

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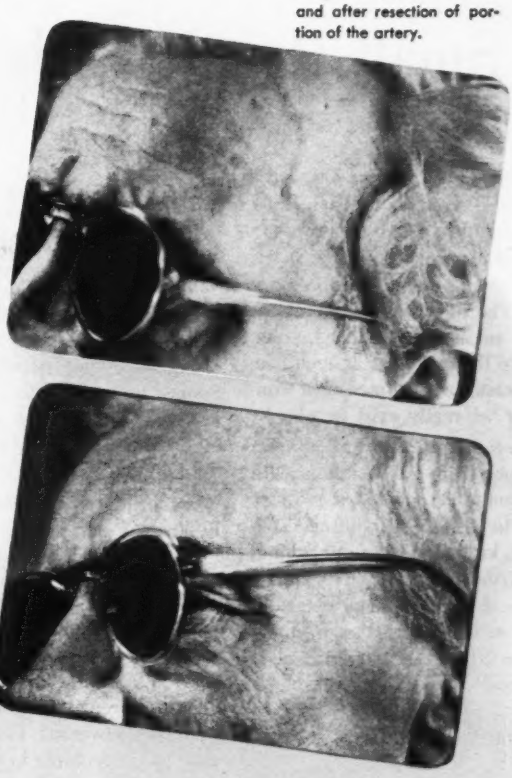

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Small Hospitals Have Big Problems

J. A. Vopni,
Secretary,
Davidson Union Hospital,
Shaunavon, Sask.

HOW OFTEN have we heard the remark: "there is no such thing as a small hospital". One reason given for such a remark is the belief that the problems of all hospitals are identical. The question is also raised, "what is a small hospital?" In fact, we who have the problems of such hospitals to contend with some times wonder whether we really exist or not.

Although the problems touched upon here are peculiar to hospitals with relatively small bed capacities, perhaps we should be thinking in terms of a certain type, kind, and class of hospital, rather in terms of bed capacity alone. Having this in mind, we can entertain little doubt as to the fact that in many respects small hospitals are in a class by themselves. They do have problems all their own. Therefore, may we consider the question: "what is a small hospital?"

Let us picture in our mind's eye a small rural town as it might have existed fifteen years ago. It has a population of around 500. It has a large house converted into a hospital, serving a wide but sparsely settled community. Looking inside the hospital, we see, first of all, the man who operates the heating plant. In all probability, he also sweeps the halls, attends to the garden, does what landscaping he has time for, carries out and burns the garbage, pumps out the sewage, pumps in water, helps carry immobile patients, and does the odd repair job. In terms of the large hospital, he is the engineer, orderly, janitor, gardener, city scavenging department, city water works, repair man, et cetera. With the proper man in this position, there is no problem—but to find the man who can and is willing to fill this office is often a problem and one peculiar only to small hospitals.

When we go upstairs — or we might even meet her in the furnace room—we will usually find an exceptionally efficient young lady who fills the role of matron, administrator, purchasing agent, dietitian, and admitting officer. It is not unusual at times to find her doing some laundry or cooking a meal. Sooner or later some young man realizes what an efficient, diplomatic, tolerant person this young lady is. Then the month of June rolls around or for some other reason she leaves the hospital. Needless to say, this young lady did not leave a big hospital to become matron in a small hospital. The chances are that she just "grew up" with the small hospital. The hospital board spotted her when the other matron left and they put her in charge. These Florence Nightingales are few and far between. The small hospital now has a problem in replacing her.

The Small Hospital Today

How does this picture look today? We all know what the nursing situation is. Nurses do not grow up with hospitals any more. Nurses with experience and willing to assume responsibility look for opportunities to gain more and better experience in the larger, better equipped hospitals. The hospital board is now confronted with a woeful lack of skilled management. For, after all, the board members of these small hospitals are recruited from such sources as municipal and town councils, farms, and various businesses in small towns. These men obviously have very little if any experience in hospital administration.

The trend today is to recruit a secretary-manager or administrator from the same source as a board member, if the hospital can afford it. Doctors with organizing and business ability or experienced administrators are not available to the small hospital for obvious reasons.

The man with the title of administrator is a part-time man. He usually finds that his first problem is to obtain and keep a qualified staff. Often it is when the staff problem becomes acute that the board realizes that someone must specialize, to some extent, on this business of running the small hospital. This administrator soon learns that nurses, and more particularly qualified nursing superintendents, just do not clamour for the opportunity of joining the staff of the small hospital. Nursing is a proud profession but a tough one. It takes years of study, labour and tears to become a registered nurse. She is then faced with a career of day shifts and night shifts, shifts on Sundays and holidays. Often the eyes of the whole community are turned on her the moment she is off duty. Lack of facilities in small hospitals make working conditions difficult. Inadequate living quarters sometimes means living in the hospital atmosphere 24 hours a day. A great number of persons will not even consider working in a hospital where separate living quarters are not provided. In addition, there is the lack of recreational facilities, and so on.

By the time the administrator has recruited some kind of a staff and acquainted himself with the intricate mechanism of a small hospital, he has had to study and labour. When he has taken an otherwise unqualified nurse, shown her the ins and outs, encouraged her along the path of a nursing superintendent, and finds that she stays on the job for awhile, do you not think that he deserves the title of a small hospital administrator, even without a diploma?

Why So Many Small Hospitals?

Most problems peculiar to small hospitals are to a great extent contingent on the fact that there are so many of them. On July 1, 1952, there were 164 hospitals in Saskatchewan, not including D.V.A. hospitals, Indian hospitals, homes for the aged and infirm, mental hospitals, and sanatoria. Out of these 164 hospitals, 16 small units are operated as nursing homes under permit and the remaining 148 are operated as general hospitals. Of the 148 general hospitals, 40 were rated at more than 25 beds and the remaining 108 were units of 25 beds or less. So 73 per cent of our general hospitals are definitely

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From an address presented at the Saskatchewan Hospital Association convention, Saskatoon, Oct., 1952.

Provincial Notes

Nova Scotia

LUNENBURG. After 73 years of continuous service to the fishermen and mariners sailing out of this port, the Lunenburg Marine Hospital closed its doors at the end of March. The reason for closing this institution was the fact that the salt fishing fleet has dwindled to only a few vessels. Any patients, from these vessels, can now be treated at the Fishermen's Memorial Hospital recently opened in Lunenburg.

* * * *

NEW WATERFORD. Community groups are studying the possibility of erecting a new hospital for this area. The present institution, erected over 35 years ago, was built to service 40 beds but now has a total of 70, without any material expansion of the plant. The proposed hospital would contain at least 100 beds.

New Brunswick

MONCTON. The Moncton Hospital reported a surplus at the end of its fiscal year. While expenditures last year amounted to more than half a million dollars, approximately $44,000 more than the year before, the revenue showed an increase of about $37,000. This left a deficit in the current account of about $7,000, which was more than taken care of by government grants. It is expected that the new Moncton Hospital will be officially opened in June.

Quebec

HULL. A new 300-bed hospital will be built to replace the present Hôpital du Sacré-Coeur. The hospital will be built in the shape of a cross with four wings, each eight storeys high. A separate nurses' residence, with accommodation for 200, will be constructed at one side of the hospital and, on the other side, a residence for doctors and interns. The latter would be three storeys high. Plans also call for landscaped grounds and flower gardens. The hospital is operated by the Soeurs de Charité de la Providence; architect for the new building is Lucien Sarra-Bournet of Hull.

* * * *

QUEBEC. Construction of a new wing is under way at the Hôpital Laval. The new wing will increase the hospital's capacity by 250 beds and will be six storeys high. It will contain laboratories, an x-ray department, and surgical department.

Ontario

CHATHAM. A new addition is proposed for the Chatham Public General Hospital. The building will have four storeys and a basement and will provide accommodation for 200 additional patients. In constructing the new wing, the condemned back section of the present hospital will be demolished and a portion of the new building erected in its place. It has not been decided if the wing will be erected completely at one time or whether it will be built in stages as finances permit.

* * * *

FERGUS. At least $40,000 is slated for the renovation of the old Groves Memorial Hospital. After remodelling, it will be used as a centre for the chronically ill and a new hospital will be built.

* * * *

GALT. The new South Waterloo Memorial Hospital is expected to be completed about mid-summer. The four-storey buff brick and steel structure will contain 170 beds and 45 bassinets. It is built on a T-shaped plan with a basement and sub-basement, with provision for future expansion. A total of $800,000 has been pledged by citizens of the four communities whom the hospital will serve —Galt, Preston, Hespeler, and the township of North Dumfries. Architects are Allward and Gouinlock of Toronto.

* * * *

KINGSTON. The Angada Children's Hospital, the 81-bed children's wing of the Kingston General Hospital, was officially opened last month.

* * * *

ORILLIA. A new unit will be built at the Ontario Hospital School in Orillia Township. The building will include an isolation section of 376 beds. The Ontario Government has granted $2,680,000 towards the expansion costs.

* * * *

PEMBROKE. It is expected that the new wing of the Pembroke Cottage Hospital will be ready for occupancy sometime this month. The total cost of the addition is estimated to be $550,000.

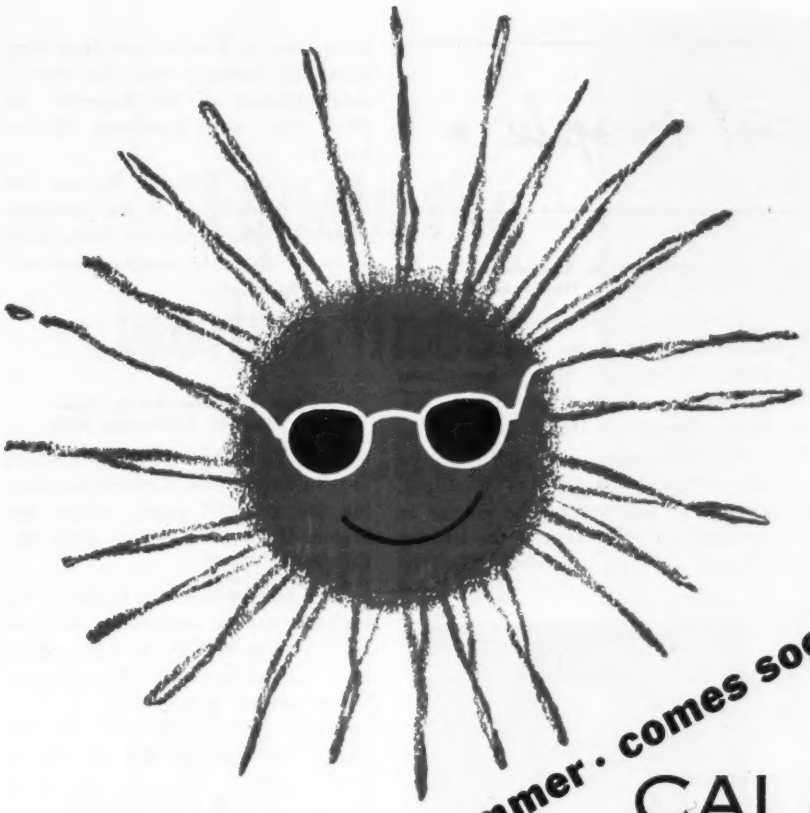
* * * *

ST. CATHARINES. Construction of the new 125-bed Hotel Dieu Hospital is nearing completion. The hospital will have six storeys and two basement levels. One of the features of the hospital is that it can be expanded in the future at minimum cost. A 100-bed addition could be built without a corresponding increase in facilities such as operating rooms, laboratories, kitchen, heating and laundry operations.

* * * *

WALKERTON. Alterations will be made to the Bruce County General Hospital and obsolete equipment replaced. It is planned to erect a separate heating plant to replace the present coal-burning furnace, install a new elevator, and remodel the central portion of the hospital. To help finance these alterations, the board of trustees has announced that a public

(Concluded on page 100)



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CALADRYL is cosmetically inconspicuous, resists rubbing off, yet washes or rinses off readily.

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Notes About People

James E. Robinson Appointed to Children's Hospital, Winnipeg

James E. Robinson, formerly Acting Director of the Division of Hospital Administration and Standards, Department of Public Health, Regina, Sask., has been appointed superintendent of the Children's Hospital, Winnipeg, Man.

In 1939, Mr. Robinson graduated from the University of Saskatchewan in economics and political science. He served five years in the Canadian Army during World War II and was discharged in 1945 with the rank of Captain. In September, 1945, he was appointed occupational counsellor in the Department of Veterans' Affairs, Regina. In 1947, he joined the newly organized Saskatchewan Hospital Services Plan as a special assistant and soon became the assistant executive director. In 1949, he was granted a leave of absence to attend Columbia University, New York City, for a course in hospital administration. He served his administrative residency at the Hospital of the University of Pennsylvania, Philadelphia, Pa. In 1951, Mr. Robinson joined the Saskatchewan Department of Public Health as a hospital adminstrative consultant. He assumed his new duties this month.

James E. Robinson

Franklin H. Silversides Appointed to New Position

Franklin H. Silversides, formerly superintendent of the Children's Hospital, Winnipeg, Man., has been appointed superintendent of the Children's Hospital in Halifax, N.S.

Mr. Silversides was pharmacist at the Children's Hospital in Winnipeg, before he enrolled in the course in hospital administration at the University of Toronto, in 1949. When he had completed his administrative residency at the Children's Hospital, he was appointed assistant superintendent and, in 1951, became superintendent.

Franklin H. Silversides

* * * *

Mother R. Tetrault Appointed to Hôtel-Dieu in Montreal

Mother R. Tetrault, formerly Mother Superior of the Hotel Dieu Hospital in Windsor, Ont., has been appointed Assistant General at Hôtel-Dieu in Montreal.

In 1931, she entered the novitiate at Hotel Dieu in Windsor and five years later began studies at the school of nursing, graduating in 1938. Two years of supervisory work followed and then Sister Tetrault obtained her B.Sc. degree in nursing at St. Louis, Mo. In 1943, she was appointed superintendent of nursing at the Hotel Dieu in Windsor and later combined that position with the post of superintendent of the hospital. In 1950, she was appointed Mother Superior.

As Assistant General, Mother Tetrault is a member of the executive council of the Religious Hospitalers of St. Joseph. She assumed her new duties last month.

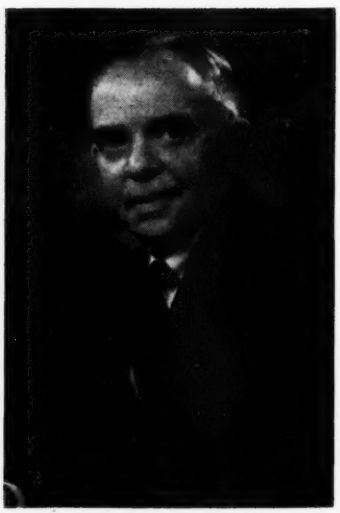
* * * *

Edgar E. Dutton Retires from Galt Hospital, Lethbridge, Alta.

Edgar E. Dutton, secretary-treasurer of the Galt Hospital, Lethbridge, Alta., for the past 33 years, retired last March. He is succeeded by John McGilp.

Born and educated in England, Mr. Dutton came to Canada in the year 1912. During World War I he enlisted in the Royal Canadian Army Medical Corps, serving overseas with the No. 8 Canadian Field Ambulance for over three years and attaining the rank of Staff Sergeant. After demobilization, he wrote a book as a permanent record of his unit's history—a work which was highly commended by military and civil authorities. Before starting his hospital career, he filled various positions ranging from court reporter to business and municipal administrative offices. In 1919, he was asked to manage the Galt Hospital in Lethbridge, Alta.

He is a member of the American College of Hospital Administrators and



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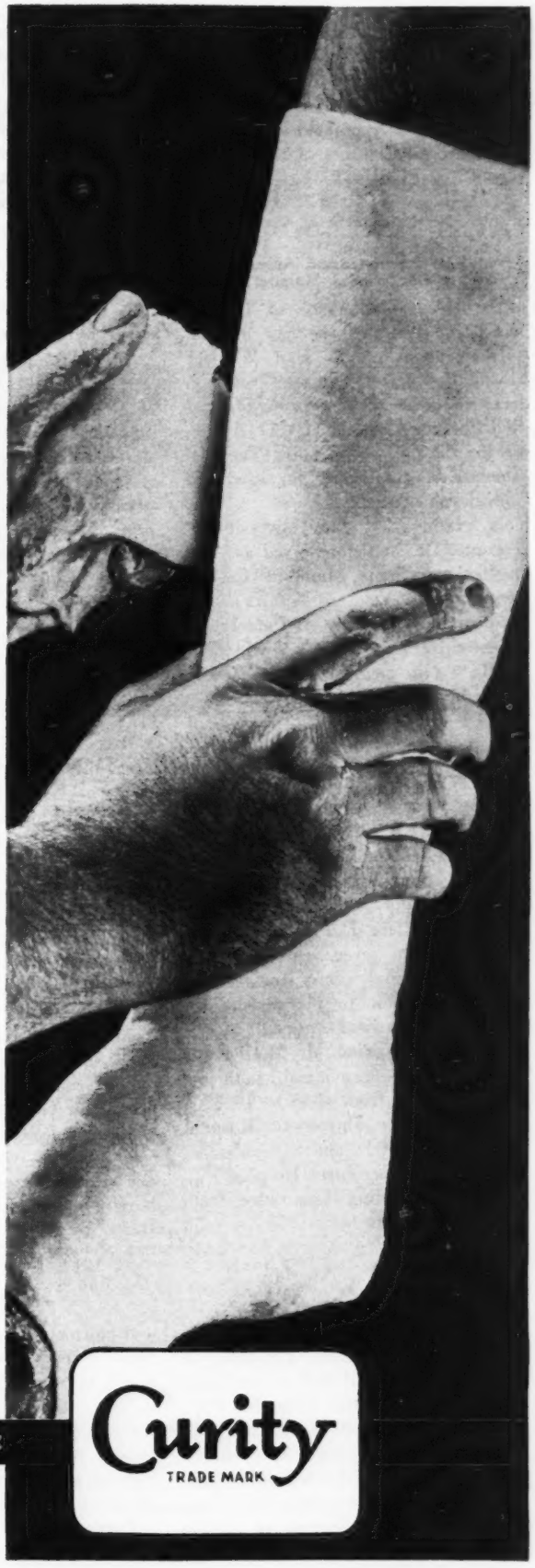

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has been closely associated with the provincial hospital association since 1920. He has served two terms as president and has acted on many committees. He was appointed chairman of the Board of Trustees of the Alberta Blue Cross Plan in 1951.

* * * *

Medical Superintendent Appointed to East Windsor Hospital

Dr. John M. Nettleton of Toronto has been appointed the new medical superintendent of the East Windsor Hospital, Windsor, Ont. Dr. Nettleton has been the medical superintendent of Red Chevron Hospital (DVA), Toronto, for the past seven years. The Red Chevron Hospital cares for aged and convalescent patients.

A graduate of the University of Toronto, Dr. Nettleton served as chief medical officer in Manitoba for the Department of Veterans' Affairs and as medical superintendent of Deer Lodge Hospital (DVA) during World War II. He is a life member of the Academy of Medicine.

* * * *

New Appointment at Galt Hospital, Lethbridge, Alta.

John McGilp, formerly of the Alberta Department of Public Health, has accepted the position of secretary-treasurer of the Galt Hospital in Lethbridge, Alta. He had been with the department for seven years as supervisor of hospital administration and assistant director to the division of hospital and medical services.

During that period, Mr. McGilp was a member of the provincial health survey committee from 1948 to 1949; a member of the University Hospital Board from 1951; and a member of the Alberta Government Hospital Finance Fact Finding Committee from Sept., 1952 until Jan., 1953.

* * * *

Member of the Montreal General Awarded Overseas Scholarship

Dr. Donald E. Smith, a member of the resident medical staff of the Montreal General Hospital, Montreal, P.Q., has been awarded a Beaverbrook Scholarship in medicine. The scholarships, sponsored by Lord Beaverbrook, enable students or graduates of the University of New Brunswick to take one year's post-graduate studies at the University of London or, in the case of medical students, one year of training at a hospital affiliated with the university.

Dr. Smith, a native of Saint John, N.B., graduated in 1946 from the premedical course at the University of New Brunswick and received his M.D., C.M. degree from McGill University in 1950.

* * * *

Served as Board Member for 35 Years

After serving the Royal Inland Hospital, Kamloops, B.C., for a span of 35 years, William Brennan resigned from the Board of Directors last March. In 1918, during the 'flu epidemic, he began by offering his services when the hospital staff was hard pressed. He was chairman of the board for some years and since 1934 has been the provincial government's representative on the board.

* * * *

Mary S. Mathewson

Miss Mary Seabury Mathewson, B.Sc., R.N., director of nursing at the Montreal General Hospital, died on March 13th in her 56th year. She was a native of Montreal and graduated from the Montreal General Hospital School of Nursing in 1925. She took post-graduate courses at McGill School for Graduate Nurses and Teachers' College, Columbia University.

Miss Mathewson was assistant director of the Child Welfare Association from 1929 until 1933. From 1933 to 1938 she was part-time director of public health nursing at the McGill School for Graduate Nurses and from 1938 until 1946 she was full-time director. In that year she assumed her duties as director of nursing at the Montreal General.

* * * *

Mary Bliss

A former hospital superintendent, Miss Mary Forster Bliss died last month in Sunnybrook Hospital, Toronto, Ont., where she had been a patient for the past six years. A native of Ottawa, Miss Bliss received her nurses' training at the Royal Victoria Hospital, Montreal, P.Q.

During World War I, she served overseas and was awarded the Royal Red Cross Medal. On her return to Canada, Miss Bliss was appointed superintendent of the Soldiers' Memorial Hospital at Campbellton, N.B. Afterwards she was superintendent of hospitals in Guelph, Smiths Falls, and Galt, Ontario, respectively.

• J. E. Ledgerwood, formerly accountant at Swift Current Union Hospital, Swift Current, Sask., has been appointed secretary-manager of Leader Union Hospital, Leader, Sask. Prior to his post at Swift Current, Mr. Ledgerwood was secretary-manager of the Union Hospital at Central Butte, Sask.

• Miss Laura M. Lambe, superintendent of nurses at the Metropolitan Hospital, Windsor, Ont., since 1949, has retired from active nursing. The success of the nursing demonstration program at the Windsor hospital was due in no small measure to Miss Lambe's understanding co-operation.

• J. Harris McPhedran, M.D., of Toronto, Ont., was elected president of the College of Physicians and Surgeons of Ontario at the 88th annual meeting held in Toronto last month.

• Miss Margaret Sullivan has been appointed as business manager of the Oakville-Trafalgar Memorial Hospital, Oakville, Ont.

• Edwin Chowen has been named chairman of the Bentley Municipal Hospital Board, Bentley, Alta. He succeeds A. G. Sanders who has retired after many years of service.

• Miss Irene Shaw, administrator of the Peel Memorial Hospital, Brampton, Ont., for the past five years, resigned last March.

• Miss Dorothy Colquhoun, instructor in nurse education at the University of Alberta, Edmonton, Alta., has been appointed director of nursing, Metropolitan General Hospital, Windsor, Ont.

• L. B. Unwin, was re-elected president of the Board of Governors of the Queen Elizabeth Hospital, Montreal, P.Q., last month.

With the Auxiliaries

Quebec Hospital Auxiliaries Form Provincial Association

Presidents of hospital auxiliaries throughout the Province of Quebec recently elected a committee with the authority to organize a provincial association of hospital auxiliaries. Mrs. J. Cecil McDougall of Westmount, who has been president of the planning committee set up in 1951 to initiate the project, was elected president of the organizational committee. The primary aim of the new organization will be to spread the growth of hospital auxiliaries throughout the province. It will also serve as a clearing house for the exchange of ideas and mutually helpful information. A greater degree of co-operation and co-ordination of volunteer effort will be possible through the offices of the provincial organization than has been experienced heretofore.

* * *

Successful Year for Auxiliary at Children's Memorial Hospital, Montreal

It was reported at a recent annual meeting that the sum of $6,500 was donated to the Children's Memorial Hospital, Montreal, by the women's auxiliary, during the past year. The main fund raising effort of the year was the Tiny Tim Appeal. Altogether, auxiliary members worked 2,826 hours for the appeal, which netted $50,000. Two rummage sales realized a combined net profit of $1,065. Hundreds of articles were sewn by the ladies and 51 volunteers worked in the hospital's out-patient department. The auxiliary has 109 members.

* * *

Auxiliary Makes Plans for Annual Garden Tour

Members of the women's auxilary to the Oakville-Trafalgar Memorial Hospital, Oakville, Ont., are making plans for their annual garden tour, the principal money raising project of the year, which will be held on June 19, 20, and 21. It is reported by the auxiliary that, in addition to voluntary service in the hospital, the auxiliary has contributed surgical equipment, furnishings, and linen costing more than $2,000 and has furnished a room for the interns at a cost of $500. The auxiliary has a total membership of 249, including 15 life members.

* * *

Community Organizations Assist Auxiliary

Many community organizations have contributed generously to the ladies' auxiliary to the new Port Perry Hospital, Port Perry, Ont., enabling it to supply many necessary articles for the hospital. Extensive sewing has been accomplished including 66 baby gowns, 5 pairs of surgical stockings, 38 cotton draw sheets, 14 rubber draw sheets, 40 quilted plastic pads, and 18 crib protectors. The sum of $250 has been handed over to the hospital board for the purchase of dishes, glassware, and blankets.

* * *

Auxiliary Donates $1,000

Linen supplies and a new microscope will be purchased with the $1,000 donation which the women's auxiliary to the Civic Hospital, North Bay, Ontario, recently made to the hospital.

* * *

Cook Book Published by Auxiliary

A cook book, published by the women's auxiliary to the Trenton and District Memorial Hospital, Trenton, Ont., and sold at 75¢ a copy, brought in a profit of $1,065. Memo calendars sold at 25¢ each netted the auxiliary $165. A quilt was also raffled, bringing in a total of $95.

* * *

New Cafeteria to be Installed at Grace Hospital, Windsor, Ont.

The women's auxiliary to the Grace Hospital, Windsor, Ont., is planning to have a new cafeteria installed in the hospital for the staff, at a cost of $2,300. During the past year a junior group of the auxiliary was formed and its members have undertaken to provide a bursary and scholarship for graduate nurses. For a number of years the senior organization has presented each graduate nurse with a thermometer. Some of the money raising activities sponsored by the auxiliary include: a concert series, held annually for the past eight years; membership tea; garden party; fashion show; and rummage sale. The group also receives contributions from interested citizens and industries in the community.

* * *

Auxiliary Undertakes New Project

At a recent meeting of the women's auxiliary to the Payzant Memorial Hospital, Windsor, N.S., it was decided that the group would supply funds for the purchase and installation of tile to cover the hospital's dining room floor.

* * *

Extractor for Laundry Purchased

An extractor for the hospital laundry has been purchased by the women's auxiliary to the Prince Edward County Hospital, Picton, Ont., at a cost of $1,104.

* * *

Auxiliary Furnishes Rooms

Three rooms at the Port Hope Hospital, Port Hope, Ont., will be completely refurnished with new bedroom suites by the ladies' auxiliary. Money for this project was raised at a Valentine tea and bazaar, which netted approximately $1,120.

* * *

Funds to be Donated for Repairs

Part of a cash balance of $1,621.21, which the women's auxiliary to the Winchester Memorial Hospital, Winchester, Ont., has on hand will be used to help defray the cost of repairs to the hospital. Urgent repairs are estimated at $560. This auxiliary has five district divisions.

Locked Bathrooms

It is excellent practice, when you design new hospital space, to specify call buttons in the toilet rooms used by patients. If locks are put on bathroom doors, they should be of the type that can be opened from the outside.

One hospital has found a solution to the problem of bathroom locks which suits it. It has installed a door chain on the inside of each bathroom door. This prevents the door being opened more than a few inches but the chain can be released from the outside in an emergency. If you make an emergency impossible, you never have to face it.

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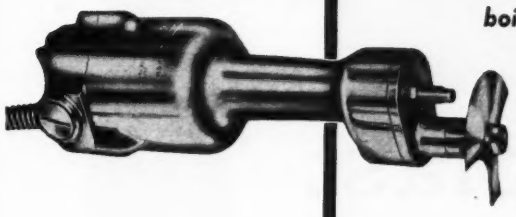
Stryker saws do not rotate—cut with safe, high-speed oscillation

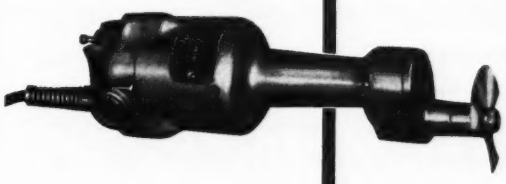
For Surgery:



The Stryker Bone Saw • Versatile, Safe Bone Surgery • Can be boiled or autoclaved with no special handling

Linear cuts such as tibial grafts, transverse or sectional cuts in various osteotomies, removal of cancellous grafts from the ilium, splitting or removal of spinal processes or laminae, fashioning of bone pegs, and cutting channels for graft insertion are among the many versatile applications of this saw with its variety of blades.

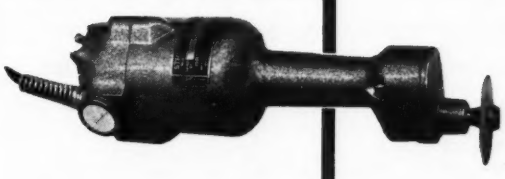
For the Pathologist:



The Stryker Autopsy Saw • Safe • Sanitary • Durable

No guards are necessary to protect the operator. The saw is electric but *does not rotate*, cutting bone by high speed oscillation without cutting adjacent soft tissues. Bone specimens may be removed for examination without exposing wide soft tissue. With adjustable sectioned blade, the wide portion can be used for removing skull cap or making long linear cuts while narrow portion can be used to take out small bone specimen.

For the Plaster Room:



The Stryker Cast Cutter • Quick • Safe • Dependable

Oscillating at high frequency, the circular saw blade cuts the rigid cast, but not the padding and skin beneath which can "give" with the oscillation. Cutting a window, bi-valving or removing a cast requires only one-fourth the usual time.

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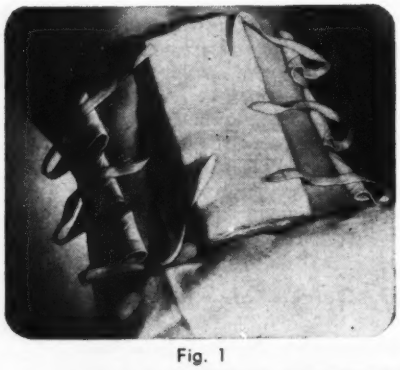

Fig. 1

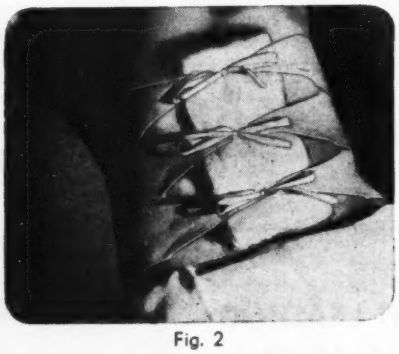

Fig. 2

When frequent dressings are necessary, the following method of applying Elastoplast may be used as a substitute for an abdominal many-tailed bandage.

Six pieces, each about 12 inches in length, are prepared from a 3-inch wide Elastoplast bandage. Tapes are attached and the completed pieces applied to the body from each side (Fig. 1). The tapes are tied over the dressing covering the wound (Fig. 2). The bandage may be applied by one person without disturbing the patient. It is easily made, provides adequate support and will remain firmly in position.

The above method is comfortable in use as the patient does not have to wear perineal stirrups to keep the bandage in place or to lie on a bandage which may become 'rucked-up'—disadvantage associated with the flannelette type of many-tailed bandage.

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Over 50 Years Service to Canadian Hospitals

To Encourage Happiness

Surely our purpose as doctors and nurses should be to encourage and develop happiness by the exclusion of everything that tends to strangle it. Not merely to fight disease so as to extend life but to make life itself fuller and more abundant. Our ancestors, our predecessors in this work, were not unintelligent and their thoughts and views are worthy of our serious consideration in these unstable days. Over a hundred years ago, Dr. William Kay wrote as follows:

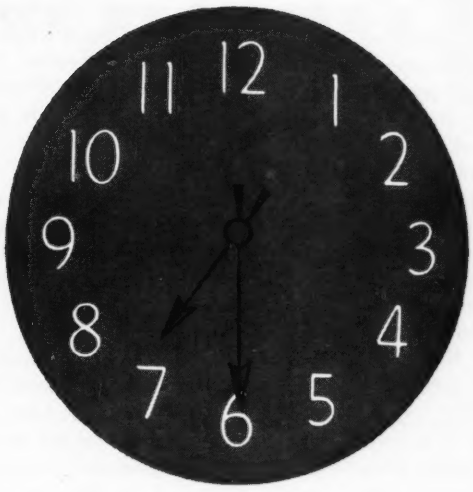
"Density of population, imperfect ventilation, deficient drainage, and inadequate supplies of water are undoubtedly, in themselves, conditions most unfavourable to health and fruitful sources of disease. But any inquiry into the physical circumstances affecting the health of the inhabitants of a particular locality or district would obviously be most incomplete did it fail minutely to investigate their habits of life, their occupations, earnings, diet, clothing, and the multiplicity of subordinate but collectively powerful agents, acting upon a population in their individual and social position."

In other words, "study how the people live" and there is social medicine—100 years ago!

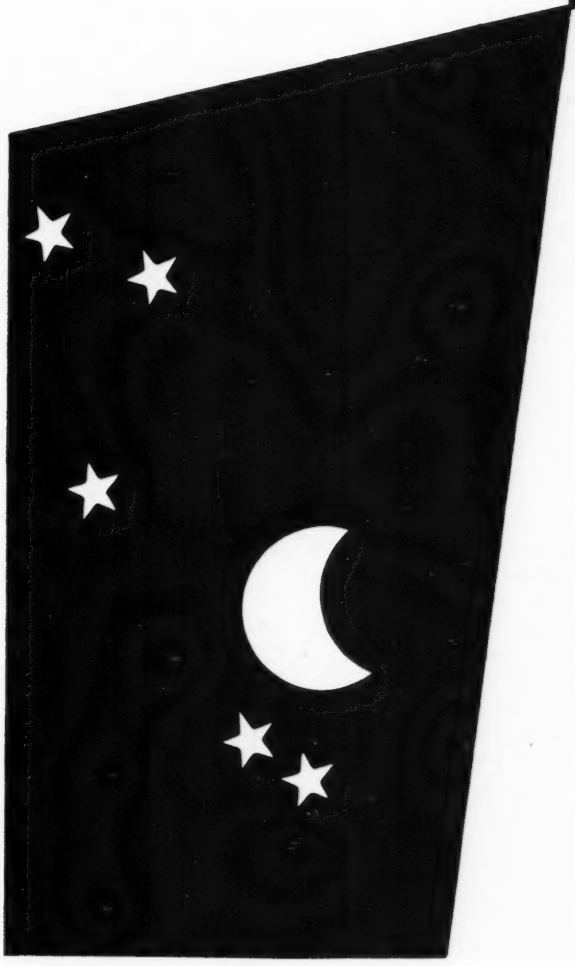
The opportunity for pioneering is as great today as it has ever been, but we must search for the opportunity and gaze clear-eyed at the problem. In acclaiming new thoughts and ideas we must not discard knowledge obtained through the hard school of experience for, if we do, we put back the clock.—*From "The Canadian Nurse", March, 1953.*

Medical Viewpoint

Biologically speaking, the nurse is a peculiar species of comparatively recent origin, generally found in a protective colouring of white, who works with those who act as the medicinemen of the human race, has a tremendous capacity for work and long hours, has an unusually well-developed patience-centre in the brain, pays little or no income tax, is regarded as a highly marriageable commodity—and altogether represents one of the highest forms of adaptation achieved by the female sex. As such a paragon, she completely knocks into a cocked hat Kipling's expression, "The female of the species is more deadly than the male."—*E. P. Scarlett, M.D.*



habit time



- Habit Time of Bowel Movement—not merely relief of constipation—is secured by proper use of Petrolagar.

Petrolagar promotes development of normally hydrated, comfortable and easily passed stools.

Once achieved, the normal bowel habit may often maintain itself even though the dosage of this adjuvant is slowly tapered off.

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Supplied in bottles of 16 fl. ozs.

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An Efficient Laundry

(Concluded from page 43)

pital is considered to be good but I know of one hospital, with modern equipment, which is averaging 500 pounds per worker, per day. This, as you can see, will lead to quite a saving in a year's operating costs. Modern equipment, with proper layout and adequate space, soon justifies the initial expense involved.

The proper selection of personnel, with adequate supervision and job training, will make your laundry a better place in which to work and help to reduce labour turn-over with all its associated expense, improperly finished work, and the loss and destruction of linen.

Many foremen have instituted job training plans in such a way that any worker can subsitute for any other. This makes replacement relatively easy and production smoother. Workers can be changed hourly from job to job. This feature in itself provides a form of rest period which tends towards the reduction of ennui and its attendant effect on production. Supervision, if delegated to a foreman who supervises each area, will induce better production and reduce complaints by forming a regular channel of communication both up and down the line.

Relations with Other Departments

Problems instituted by other members of the hospital staff can be handled best by the formation of a laundry or linen committee to act as liaison with the various hospital departments. Inter-departmental friction can be smoothed out and corrective measures taken before many small problems develop into larger ones.

The nursing division can reduce the work of the sorters in the laundry by placing linen carefully in the chutes or bags. It is difficult to understand why it is necessary to send bed pans or rubber sheets to the laundry to be washed. Needles, clamps, glass, syringes, et cetera, while being a hazard to the sorters and washmen, occasionally also slip into the wash wheels and soon tear a hole in the best of the sheets—and the laundry foreman gets the blame. A lipstick inadvertently left in a nurse's pocket produces at times a very distressing shade of pink which disturbs the owner of a white uniform as well as the laundry foreman. Co-operation by the other areas of the hospital permits the laundry foreman to arrange his work schedule better and so supply the requisitioning areas with a more even and dependable flow of linen.

The quality of the work produced varies with the quality of the material used, and the training, experience, and expertness of the foreman. Poor materials cannot produce good washings nor will they stand repeated washings. In addition, their appearance is poor and deterioration and shrinkage soon result.

Inadequate steam pressure, resulting in failure to supply adequate heat, diminishes production figures and produces poor looking work. Many foremen feel that 125 pounds pressure is the ideal level to be desired.

Inventory control, while it involves some effort, is felt by many to be worthwhile; others (particularly those in the larger institutions) find it to be more trouble than it is worth. Obviously, however, inventory control is to be desired and it does much to prevent losses and keep down cost. Its acceptance is a matter which will depend on the local situation.

Laundry distribution is often a vexing problem and many systems are in vogue. One of the best methods that I have seen consists of two locked cabinets, A and B, placed in areas whose daily quota was established by the linen committee. Cabinet A is, so to speak, in use today while Cabinet B is being filled. The next day, the supplies of B are used while A is being filled. In addition, there is an emergency supply located in one area of the hospital. This system, it was felt, helped to maintain adequate supplies on hand, prevented waste, discouraged hoarding by rendering it unnecessary, and saved inventory.

From the points I have covered, it is obvious, then, that the relationship of efficient laundry operation to patient care revolves around the necessity of maintaining an adequate, interested, and trained staff, adequate and modern equipment with satisfactory maintenance, adequate space and arrangement, satisfactory supplies to work with and satisfactory linens to work upon. Most important of all, it is necessary to have a well-trained laundry foreman who can give the leadership and supervision needed to make the whole unit function properly.

How can you obtain a good laundry superintendent? I suppose in answering this question everybody has his own ideas based on his own particular background of experience. Some hospitals are lucky enough to engage a man who has had training in a laundry school. All hospitals, however, cannot hope to attract this type of trained person and so attempt to train their own workers. Institutes can be very helpful in solving this problem.

In my own limited experience, I adopted the method of chosing a good man and then creating an interest for him in the work. I gave him books to read which we discussed together, and other periodicals.

The Canadian Laundry Research Institute in Ottawa is a valuable help to any hospital. The salesmen who visit your laundry should not be neglected. They can give you guidance in all the phases of laundry operation, help you with formulae and in improving your product. I have always felt that these men, representing reliable companies, are some of the best friends we have in the hospital laundry field. Treat them as such and you'll never regret it. Visits to other laundries and talks with your confreres are also of value. They stimulate interest and provide a means for the transfer of much information not yet in the text books.

The laundry in the hospital is a service unit and it has in itself no control over the quantity and the quality of the material which comes to it, or even the time allowed for processing. These responsibilities are under the control of the administrative staff. The laundry processes only and yet, with training, supervision, and interest in this area, the relationship of efficient laundry operation to total patient care can be understood and appreciated with the best results to the hospital as a whole.

History Plays Part When Cornerstone Laid

When Premier Duplessis laid the cornerstone for the new 750-bed Montreal General Hospital this month, the occasion had historical significance. The premier used a silver trowel, on loan from the University of Edinburgh, to lay the cornerstone. The trowel performed a similar function in 1897 when Lord Lister laid the foundation stone of the former nurses' home of the Montreal General.

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An Open Letter of Thanks to the Doctors and Hospitals of America:

We take this opportunity to thank you for the encouraging support you have given our original "Kolor-sized" banding and the proven quality of Seamless Surgeons Gloves. Thank you, too, for helping us to set the highest sales record for Seamless Surgeons Gloves ever recorded over a 12-month period – and for bearing with us while our production was pressed.

We wish we could report instant delivery on all Seamless Surgeons Gloves. While this is not immediately possible, we are working hard to make supply equal demand.

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Sincerely,

J. T. Gibbons

J. Thomas Gibbons
Vice President and
General Sales Manager

Book Reviews

PSYCHOLOGY, THE NURSE AND THE PATIENT. By Doris M. Odlum, M.A., M.R.C.S., L.R.C.P., D.P.M., Dip. Ed., Senior Psychiatrist, Elizabeth Garrett Anderson Hospital, London; Consultant Psychotherapist, West End Hospital for Nervous Diseases, London. Pp. 114. Price, 7/6d. Published by *Nursing Mirror*, Dorset House, Stamford Street, London, S.E.I.

As the author states, this book is intended to give "practical help and guidance to nurses in dealing with their patients as people rather than as animated diseases." As such, the book is an introduction to the subject of psychology rather than a textbook. Among topics touched upon are: the how and why of human behaviour, inborn mental factors, development of character and personality, the part played by emoton, and the relationship of mind and body. Other chapters relate more directly to the nurse, the patient, the hospital, and social services provided by other institutions.

Throughout *Psychology, the Nurse and the Patient*, the author has endeavoured to show the nurse how a more complete understanding of herself and others can help her to become a better nurse, more aware of the needs of the patient she serves. The author's own knowledge of human behaviour and of the problems to be encountered in dealing with people in a hospital setting is transmitted to the reader in a simple and direct style. Student nurses, especially, should find this book of interest and value.

* * * *

COLLEGIATE EDUCATION FOR NURSING. By Margaret Bridgman, consultant in the department of baccalaureate and higher degree programs, National League for Nursing. Pp. 205. Price, $2.50. Published by the Russell Sage Foundation, New York, N.Y.

Since the nurse of today has so many professional duties in addition to actual bed-side nursing, her education on a college level becomes a matter of more and more importance. Visits to over 80 American colleges have given the author an opportunity to study curricula and gain first-hand information concerning the bewildering diversity of teaching programs. *Collegiate Education for Nursing* is her critical report of this situation.

She discusses the kind of education necessary for various levels of nursing from auxiliary personnel to those who seek degrees such as a M.S. or Ph.D. She points out that, at the present time in the United States, registered nurses employed for all types of nursing are far outnumbered by practical nurses and other auxiliary personnel. This fact alone, she stresses, shows the need for changes in the present system of nursing education which will ensure a sufficient number of nurses with an adequate educational background to supervise, plan, and conduct training courses for this large number of auxiliary workers. Only educational institutions, emphasizes the author, can provide a satisfactory answer to the problem of nursing education; and colleges and universities must assume their part of the responsibility.

* * * *

PUBLIC HEALTH EDUCATION—Its Tools and Procedures. By H. E. Kleinschmidt, M.D. and Savel Zimand. Pp. 302. Illustrated. Price, $4.50. Published by The MacMillan Company, New York, and distributed in Canada by The MacMillan Company of Canada, Toronto.

Information, explanations, and myriad details concerning the tools and procedures used in public health education abound in this well-written volume. Throughout the book, stress is placed on the idea that education is a process of intellectual growth and that it cannot be forced on an individual. Thus the health educator is pictured as a person who leads but does not use high-pressure salesmanship to sell his bill of goods.

Various media of communication are discussed with these views in mind — how to make a good speech, the use of printed matter, exhibits, radio, and motion pictures. Methods of teaching are considered — training on the job, health campaigns, and classroom teaching outside the school, such as the Red Cross method of teaching first aid.

Sprinkled with humourous line drawings, and full of practical suggestions, this book is both very readable and very useful. Anyone interested in ways and means of promoting good health in the community through education will find this book a storehouse of information.

* * * *

The Asthmatic Child

The second edition of *The Asthmatic Child*, The Prevention of Asthma by Simple Home Methods, by G. F. Walker, M.D., F.R.F.P.S.G., D.C.H., M.R.C.P., is currently available. Printed in Great Britain by John Wright and Sons Ltd, Bristol, this booklet may be obtained through The MacMillan Company of Canada Ltd., Toronto, at the price of 50 cents per copy.

The booklet contains detailed descriptions and illustrations of exercises which are intended to develop and strengthen the muscles of the chest wall, as well as to correct gait and posture—all very important in the prevention and cure of asthma in children. Dr. Walker, in his introductory text, summarizes many helpful suggestions which are intended as a general guide to understanding and preventing this disease in children.

* * * *

A.H.A. Manual of Hospital Maintenance

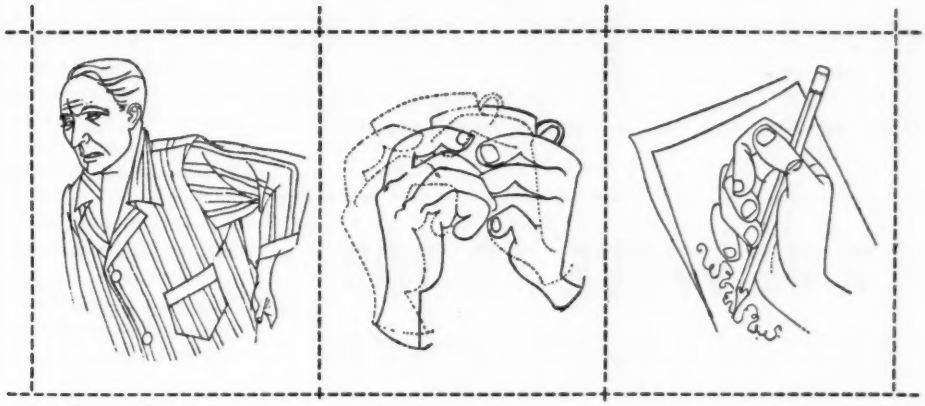
A general guide for maintenance supervisors, hospital executives, and maintenance committees of governoring boards is the *Manual of Hospital Maintenance* published by the American Hospital Association. Basic preparation of this manual has been undertaken by members of the committee on repairs and maintenance of the A.H.A. Council on Hospital Planning with the assistance of and contributions from many authorities in the field.

The manual is A.H.A. publication M22-52 and contains 116 pages, including a list of suggested readings on the subject.

Paint Seal

When you have painters doing a room, have them leave each window open a half inch or so at top and bottom until it is dry. You not only ventilate the room but you prevent sealing the windows closed. Windows get smashed and people get cut in the process of forcing sealed windows open.

new uniform oral dosage



in muscle spasm of rheumatic disorders | **in acute alcoholism** | **in certain neurologic disorders**

The new, uniform oral dose for adults is 1-3 grams. This may be repeated 3-5 times per day.

The first dose prescribed should be at the lower end of the recommended dosage range (an occasional patient may complain of side effects when large doses are given at the start of Tolserol therapy). Subsequent doses may be adjusted to the needs of the individual patient. Whenever possible, Tolserol should be given after meals. When Tolserol is given between meals, it is desirable that the patient first drink ⅓ glass of milk or fruit juice.

Tolserol

Squibb Mephenesin

Tablets, 0.5 Gm., bottles of 100; *Elixir*, 0.1 Gm. per cc., 16 oz. bottles; *Intravenous Solution*, 20 mg. per cc., 100 cc. ampuls.

SQUIBB

Health or Sickness Insurance?

(The following is an editorial, written by Dr. Gordon Bates, general director of the Health League of Canada, appearing in "Health", Jan.-Feb., 1953.)

The late Dr. Cody, distinguished president of the University of Toronto, once defined the essential of a liberal education as a knowledge of one's mother tongue—a very significant statement if one thinks about it. If, for example, one could learn the meaning of all of the words in the dictionary, one would *ipso facto* have achieved as much knowledge as Bacon himself. It is, therefore, a curious anomaly that even people whose general knowledge—whether acquired through reading the dictionary or graduating from a university—tolerate the misuse of terms. One of the terms constantly misused is the term health insurance.

The social machinery which most people call health insurance is of course no such thing and its name should be changed forthwith. What is really meant is sickness insurance. Certainly, to make financial provision for the contingency of an unexpected illness will not prevent that illness nor keep a person healthy. If we want to provide sickness insurance for our people, compulsory or otherwise, it would be wise for us to avoid the error of thinking that we are in this way promoting health except in that we may so prevent an incipient disease from developing into a serious one.

This misuse of terms is evident also in another direction. When the management and control of hospitals was removed from the direction of another cabinet minister to be placed under the direction of a new minister, called a minister of health, governments, adding the great sums of money spent on the institutional care of the sick to the microscopic sums spent on keeping people well, lumping the two, began to announce with pride these vast expenditures on health. As a matter of fact, in most cases the announcement should have been made with chagrin that too vast sums of money were spent on disease because not enough was spent on health. It would appear that, if we have achieved the laudable ambition of having ministers of health in all governments, not only should we have separate sub-departments of health and disease with public expenditures on each (separated in estimates and annual reports) but an effort should be made to make this distinction clear in the public mind.

To use a book-keeping expression, since our human capital is so important we are in the red when our sickness and death rates are too high. This can happen only when our expenditures on health are too low. When we are talking about book-keeping and finance, one wonders how much has been saved to us in cold cash, even during the past twenty years, by the reduction in sickness and death rates made possible during this period by the application of the principles of preventive medicine. No one seems to know or to have even tried to find out. Perhaps this isn't so curious after all since our misuse of terms clearly defined in the dictionary would lead a visitor from Mars to conclude that we don't even know the difference between the terms sickness and health well enough to avoid talking about the one when we really mean the other.

what is OXYGEN DOSAGE?

Effective oxygen dosage is the percentage of oxygen required to overcome anoxia. BUT the type of administering apparatus capable of delivering that percentage to the patient is essential also. The two are interdependent.

*"Oxygen Dosage and Techniques," a 16mm. sound and color motion picture reviews the apparatus required to administer the various concentrations of oxygen prescribed for clinical conditions where anoxia exists. Running time is less than 30 minutes. It is available for showings to physicians, interns, and graduate nurses.

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Your County Medical Society may wish to include this motion picture as part of one of its programs.

* *This motion picture has been approved by the Committee on Medical Motion Pictures of the American College of Surgeons.*

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Starch

(Continued from page 42)

necessary, add sufficient water to bring the total volume up to the required amount. Keep the solution hot and strain prior to use.

Many hospital laundries prefer to use a "thin-boiling" 50 per cent corn, 50 per cent wheat starch, for fine work or a 100 per cent corn starch for stiff work. They are more expensive but have the advantage of being easier to handle in use, press up more quickly with a minimum of sticking, and are most suitable for producing heavy starch work such as nurses' cuffs, collars and bibs, et cetera.

"Thin-boiling" starches can be prepared in three different ways:

(a) in solutions from twelve to sixteen ounces to the finished gallon and used hot;

(b) in solutions of eight to twelve ounces to the finished gallon and used cold (only non-congealing starches are suitable for this purpose);

(c) in what is generally called a part raw, part cooked formula which consists of 50 to 75 per cent cooked and 50 to 25 per cent raw starch.

As the latter formula requires special directions, we herewith outline the procedure to follow in a specific case: Suspend six pounds of "thin-boiling" starch in five gallons of water in cooker and bring to a boil. Turn off steam immediately free boiling begins, making certain that the steam valve is tightly closed and the blow-off valve open. Add five gallons of cold water to cool the solution to approximately 120° Farenheit (temperature which the hand can endure comfortably). Then suspend four pounds of raw starch in one-half gallon of hot water and add to cooked starch. The solution should be well stirred each time prior to using as the raw starch has a tendency to settle. It should not be re-heated and will remain perfectly fluid even when cold. A "thick-boiling" starch may be used for the raw portion of this formula if desired.

Sizing in the Wheel

Wheel sizing is definitely superior to hand dipping, being considerably more economical and efficient, particularly where fairly large lots are involved.

On completion of the last rinse or bluing, the water level is dropped to three inches and the required amount of starch is added to the wheel while the inner cylinder is turning toward the operator. The load is then run a full ten minutes and drained when the machine is still in motion. A four-inch water level should be used for netted work. The main use of "thick-boiling" starches (sizing starches) is for wheel sizing. Their chief advantage lies in the fact that they are less expensive and also have greater stiffening power per pound than the "thin-boiling" starches.

Unlike commercial laundries most hospital laundries are able to run uniform loads and it is thus possible to set up standards for each wheel as the variation between loads is not great. Once this average load standard is established, the amount of starch used and the water level should remain constant. In fact, the most important single factor is to maintain the same water level for every load. The volume of water in the wheel determines the strength of the starch bath and, consequently, the resulting stiffness of the goods. Therefore, constant water levels are essential to the production of uniform starch work.

* * * *

The following formulae are based on a hundred pound load, 36" x 54" wash-wheel at a three-inch water level, and are suggested as a guide in establishing the desired formula:

Sizing Formulae

Items	Raw Starch	Cooked Starch Six Ounce Strength
Nurses' Uniforms, etc.	3 to 4 pounds	8 to 11 gallons
Nurses' Collars, etc.	4 to 5 pounds	11 to 16 gallons
Curtains	2 to 4 pounds	5 to 11 gallons
Coats and Aprons	3 to 5 pounds	8 to 13 gallons
Shirts	1 to 3 pounds	3 to 8 gallons
Table Linen, etc.	4 to 8 ounces	½ to 1 gallon

In actual practice, the poundage or gallonage used for each particular kind of work varies from plant to plant, being dependent on the body desired, method of finishing, type of equipment, extraction time, et ectera. It is frequently desirable to size loads greater or less than the one hundred pound standard used above and the starch required is increased or decreased in proportion to the load, provided the machine in use is filled to capacity.

Do not overload the wash-wheel as this will require a higher water level, an increased quantity of starch and a longer running time. Sticky work can be caused by too much starch, improper cooking or insufficient running time. Highlights on coloured work which require heavy starching can be eliminated by raising the water level to eight or ten inches after the load has run ten mnutes and dumping immediately.

Most laundrymen appreciate the labour-saving value of sizing uniforms, coats, aprons, et cetera, in the wheel; but it is also possible to effect considerable labour saving in the starching of nurses' cuffs, collars, or bibs, in those plants where there is a large volume of this type of work and where a small wash-wheel is available for sizing purposes. These items may be sized in the regular manner except when very stiff work is required. In this case, a "thin-boiling" starch cooked from twelve to sixteen ounces to the gallon should be used and the wheel must be completely drained of water prior to adding the cooked starch. The load is then run in the regular manner, extracted, wiped lightly and finished on the press. For sizing formulae see below, left.

Review of Sizing Procedure

1. Run loads of approximately the same weight as much as possible.
2. Use same wash-wheel or one of equal size for each class of work.
3. Constant water level, 3" for bulk and 4" for netted work.
4. Constant amount of starch, whether dry or in solution.
5. Add starch when inner cylinder is turning towards operator.
6. Run full time—ten minutes—to assure proper penetration.
7. Drain wheel while still in motion to prevent excess surface starch.
8. Stop wheel once the main volume of water is drained so as to keep tangling to a minimum.

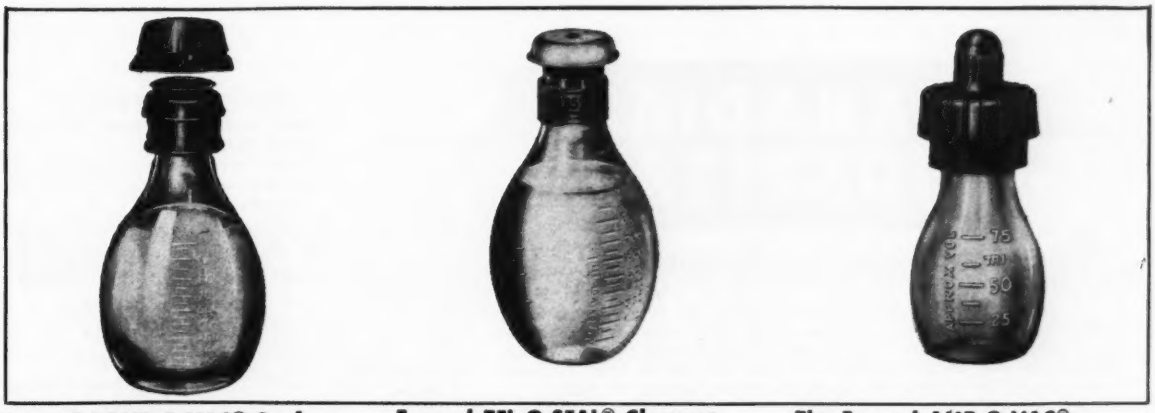
Hand Starching

It is sometimes necessary to starch certain articles by hand, particularly when the volume of work is very small. The goods are first extracted, then dipped in a starch solution of the required strength and again extracted. It is preferable to use a cooked starch, strength of solution as follows:

(a) Nurses' uniforms—from six to eight ounce strength.

(b) Nurses' collars, cuffs, caps and bibs—twelve to sixteen ounce strength, rubbing the starch well in and wiping lightly prior to finishing.

(Concluded on page 76)



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A vacuum closure that provides a practical means of avoiding wasteful, time-consuming and questionably scientific methods of sealing and handling surgical solutions. When hermetic seal is broken, contents pour from a non-drip, sterile lip.

Pour-O-Vac closures also provide a dust-proof seal for remaining contents when only partial contents of a container is used. Any need to use gauze, cotton, paper, string or tape to effect a make-shift seal of questionable efficiency is completely eliminated. In addition, the possibility of breakage or chipping damage to container lips is greatly reduced.

Pour-O-Vac Seals are reusable . . . may be repeatedly sterilized . . . are interchangeable for use with 500, 1000, 1500, 2000, and 3000 ml. Fenwal Containers. *NOTE: It is important to stress that physical construction of Pour-O-Vac Seals for external fluids cannot be confused with Tel-O-Vac Seals designed for the dispensing of intravenous fluids.*

Fenwal TEL-O-SEAL® Closures

Fenwal vacuum containers of Pyrex Brand Glass and Tel-O-Seal hermetic closures provide a practical means of insuring the sterility of hospital prepared parenteral fluids over long periods of storage. The sterility factor may be checked periodically without breaking the hermetic seal or contaminating the contents.

Following sterilization, the vacuum formed during the cooling phase produces a water-hammer when containers are inverted or jarred. This audible signal instantly indicates that vacuum seal has not been broken, and affords a simple, reliable check immediately prior to administration of contents.

The Fenwal AMP-O-VAC®

As a factual equivalent of a *reusable ampule*, the Amp-O-Vac closure and container provides a practical means of reducing waste of novocaine and similar medications by permitting withdrawals, as required, without exposing the balance of contents to the air.

Units are available in 75 ml. and 150 ml. sizes. The hermetic closures are especially designed for puncture-sealing withdrawal, and may be repeatedly sterilized and reused as often as required. Amp-O-Vac units provide desirable economies in time, medication and expense.

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A new and simplified technic for the accurate preparation of parenteral fluids.

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Starch

(Concluded from page 74)

(c) Coats and aprons—from six to eight ounce strength.
(d) Shirts—two to four ounce strength.
(e) Wearing apparel—one to four ounce strength.

Starching need no longer be a problem to the laundryman as it is no more difficult than most other phases of laundry production. All that is required is close attention to the steps outlined in this article. Should trouble occur, it can usually be traced to some simple neglect or slight variance in standard procedure.

A-Men

"Men, my dear," wrote Thomas Henry Huxley, a medical prophet, "are very queer animals—a mixture of horse nervousness, ass stubborness and camel malice, with an angel bobbing about unexpectedly like an apple in the posset, and when they can do exactly as they please are very hard to drive."

Seeing ourselves as others see us wouldn't do much good. We wouldn't believe it.—*English Digest.*

Has EVERY precaution been taken?...

Every precaution has not been taken unless, in addition to all other measures, BIO-SORB* is used as a glove lubricant, for BIO-SORB *completely eliminates* glove powder adhesions — thus helping to reduce the likelihood of postoperative complications.

All published reports agree that talc as a glove lubricant is unsafe. The hazards inherent in its use are virtually impossible to eliminate, for implantation of talc may occur in many ways — from unwashed gloves, perforations in gloves, spillage onto sponges, instruments and suture material, and by the air-borne route.

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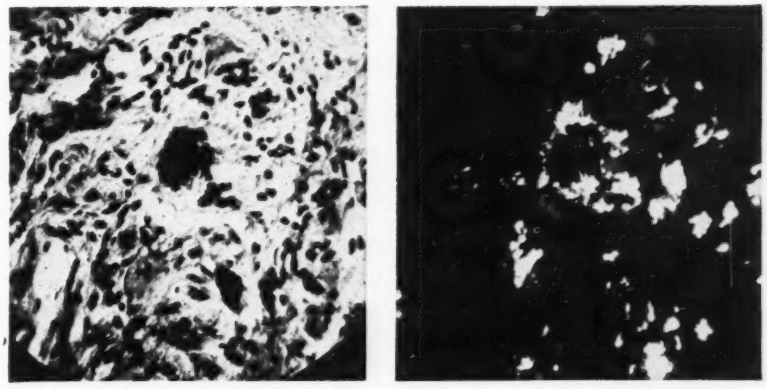
Routine use of BIO-SORB in the glove-preparation room eliminates the danger of pneumonokoniosis from talc.



Talc granulomas in myometrium. Identical fields: left, under ordinary; right, under polarized light.

BIO-SORB POWDER

BIO-SORB not only is *safe*, but is a more efficient glove lubricant than talc. BIO-SORB is convenient, economical. BIO-SORB is readily sterilized by autoclaving. It does not produce deterioration of rubber gloves, and is readily adapted to all established OR techniques.

BIO-SORB was developed in cooperation with National Starch Products, Inc. Available in individual service packets, and in ready to autoclave 5 pound cans.

ETHICON SUTURE DIVISION

Johnson & Johnson

LIMITED MONTREAL

*Trade Mark

Medical Records

(Concluded from page 34)

ticable and desirable. On the other hand, the audit makes possible the early and adequate recognition of the special merits of most doctors and they have greater opportunities to learn from their own experiences and to profit from the experiences of their colleagues.

It is obvious that in the medical audit the record of the patient becomes a document of immense value, for the best care of a patient may be erroneously represented to the auditor by a poor medical record and thus reflect unwarranted discredit upon the attending physician. There is, then, additional stimulus for a hospital's administration to insist upon adequate and prompt recording of the patient's condition and progress, while the medical staff demonstrates that the need for good medical records stimulates good medical care.

Every good medical record must consist of an orderly arrangement of data to justify the diagnosis, warrant the treatment, explain the end results, and it must record unusual incidents that happened to the patient in the course of his stay in the hospital. All of this should appear in the doctor's portion of the record, for a good medical record should stand alone, even without the nurses' notes.

The usefulness of the medical record to the patient is definite but limited, except insofar as it influences his care. The record saves duplication of effort and facilitates promptness in his care upon a future admission. It also supplies his doctor with information that he cannot be expected to remember in detail, and the graphic records may often reveal the first signs of developing complication or of the subtle changes towards health.

Research

Finally, medical records have potential usefulness in medical research. Although this is often thought to be the primary reason for preserving medical records, and usually encourages the administration of the hospital to go to considerable expense and efforts to preserve the records in an available fashion, it must be admitted that only those records which describe the highest quality of medical care are ordinarily well enough written to be of research value. In others, one is frequently frustrated by omissions of data that is ordinarily thought to be a part of every medical record.

Of particular research value are the medical records of patients who are taking part in a special study. Here, the medical record is as important as the laboratory worker's notebook. The record is kept with interest. With forethought as a guide, the medical record contains every detail of information essential to further the research project. From such studies the physician is able to obtain data that is truly worthy of statistical evaluation.

Summary

The short and long-term usefulness of medical records has here been reviewed. The hospital as a legally responsible body, the physician, and the medical auditors, are particularly interested in recent discharges and in the storage of the documents for the relatively short legal period. The medical audit performs a valuable service to both the hospital and the doctors on its staff, for it helps them in the constant effort to achieve higher standards of medical care. Long-term usefulness of the medical record is displayed by its value to the patient upon returning to the hospital or upon being referred to another physician. As a source of medical research data, good medical records have long-term value.

In the interests of their long-term usefulness, hospitals are willing to spend considerable resources in setting up medical record departments much in excess of legal needs. Most doctors will agree with Sir William Osler's admonition that "each case has its lesson." But no lesson will arise from medical records that remain to gather dust upon the shelves. It cannot be stressed too often that a medical record library is a *working* library. In an age like ours when medical evolution is proceeding at jet-speed, the medical record has gained markedly in its importance as a research tool. But, like the tools stored in the loft of the barn, they do no work without a hand upon them. Stored unused, weighing their tons upon the earth, and barring their short legal value, 45 tons of medical records are worth $180.00.

Life is certainly colourful. We are either trying to get out of the red or get rid of the blues. — *English Digest*

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some of the significant features of which are:

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- Controlled application over large or small areas
- Elimination of electrodes, pads and danger of arcs

Raytheon *Microtherm Console* Model CMD5 has full floating arm and Directors for treating irregular, local or large areas.

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X-RAY DIVISION — TORONTO, ONTARIO

CSA APPROVED CANADIAN MADE X-RAY EQUIPMENT

RAYTHEON

Excellence in Electronics

L'Intercommunication

(Suite de la page 48)

toires, les corridors, et caetera. Ce système fut un des premiers à être installés dans nos hôpitaux modernes. Nous ne croyons pas qu'il existe une nouvelle construction hospitalière qui voudrait s'en passer.

Son fonctionnement est très simple. Veut-on localiser une personne? Immédiatement le bureau d'information transmet le message qui est reçu par chacun des haut-parleurs. La personne recherchée est aussitôt répérée et peut communiquer avec la préposée à l'information. Seuls les intéressés entendent le message car celui-ci, transmis discrètement, échappe aux malades et aux étrangers.

Cette installation peut aussi se prêter à un signal-horaire. Aux heures données, un timbre harmonieux résonne, qui prévient le personnel de tel office à remplir, supprimant ainsi les continuels coups d'oeil à l'horloge, les bruyants sons de cloches ou les retards involontaires. Un appel général peut se transmettre simultanément à tous les départements.

Diètes et grande cuisine

Avec l'importance de plus en plus grande que prennent aujourd'hui la diététique et l'aménagement de grandes cuisines et de cuisines particulières aux régimes, la création d'un système d'appel répondant bien aux besoins de ces services est maintenant chose faite. Les spécialistes en intercommunication installent depuis quelque temps déjà un système qui établit la liaison dans les deux sens, directe et rapide, des divers départements chargés de l'alimentation.

Ainsi, la grande cuisine, la cuisine particulière aux régimes et les ascenseurs sont maintenant reliés entre eux, permettant aussi la communication entre les préposés aux ordres, à la préparation et à la livraison des repas et des aliments à travers l'hôpital. Il devient donc possible de placer ses ordres directement à la grande cuisine sans passer par aucun intermédiaire, ou d'apporter un changement au menu régulier à la dernière minute. On évite de la sorte les longues attentes au téléphone particulièrement occupé aux heures des repas.

Pharmacie et services

Un système semblable au précédent est aujourd'hui installé entre la grande pharmacie, les dispensaires, les laboratoires, le magasin, les salles d'opération, et caetera. Comme l'autre, ce système libère le téléphone tout en accélérant le service et en donnant à tous points de vue un rendement supérieur. Plus d'attente mais une conversation directe avec le département concerné.

Haut-parleurs et téléphones combinés

On ne saurait oublier ici, au nombre des systèmes d'appels de base, la possibilité d'intercommunications par haut-parleurs et téléphone combinés.

L'administration de la vaste organisation qu'est l'hôpital d'aujourd'hui exige le maintien d'une liaison rapide entre la direction et les chefs de service. Cette liaison, un système particulier peut la réaliser dans toutes les conditions désirables de permanence et de célérité. Un système a, en effet, été crée précisément pour maintenir une communication dans les deux sens, permanente et directe, entre les bureaux de l'administration et les divers services sous ses ordres.

Les services peuvent aussi communiquer entre eux grâce à un téléphone interdépartemental, laissant ainsi le téléphone libre pour les communications avec l'extérieur. Le personnel peut recueillir rapidement l'information utile avant d'utiliser le téléphone exterieur pour la communiquer, supprimant ainsi les retards, les appels répétés et des ennuis de toutes sortes. Les cliniques, les départements de rayons-x et autres utilisent avantageusement ce système d'intercommunication.

Avantages principaux: simplicité de fonctionnement; diminution de travail pour l'opératrice; il permet aussi, dans les grands établissements, de supprimer une opératrice sur deux.

Equipment portatif

En plus des principaux systèmes d'intercommunication mentionnés à date, il faut ajouter le très utile équipement portatif, qui s'avère de plus en plus indispensable dans plusieurs immeubles hospitaliers. Il ne comporte que des installations portatives ou fixes que l'on utilise au besoin dans les salles de cours, la bibliothèque, l'auditorium, et caetera. Son but est d'amplifier la voix de l'orateur, du conférencier ou toute émission en cours, afin que les voix parviennent claires et distinctes jusque dans les coins les plus reculés de l'assemblée. L'orateur, n'ayant pas à élever la voix pour se faire entendre, peut discourir plus à l'aise et plus

(Suite à la page 82)

linoleum

scores a long, high record...

For over forty years now, Dominion linoleum has been turning in a consistently high record of performance in places of recreation and business all over Canada. Time only serves to prove its quality. It wears and wears, retaining its good looks and resilience because colour, design and cushioning substance go right through to the base.

Dominion linoleum is versatile, too, being equally adaptable to individual designs and colour combinations emphasizing the spirit and assisting in the operation of stores of all kinds, schools, gymnasiums, hospitals, theatres, churches, office buildings . . .

It is *economical* also. Besides its time-tested wearing qualities, Dominion linoleum continues throughout its long life to be inexpensive to clean and maintain.

Before you build or renovate, be sure to consult your architect or flooring contractor about the multiple *proven* advantages of Dominion linoleum. For further colour illustrations of linoleum floors, or suggestions for your own use, drop us a line.

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IN TILES • BY-THE-YARD

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naturellement. L'audition est plus agréable et les auditeurs plus attentifs.

Ce système permet de faire entendre d'une façon impeccable toute émission musicale, enregistrée ou locale. Il se prête, comme on le voit, aux applications les plus diverses et les plus pratiques. Il rehausse particulièrement l'éclat de certaines fêtes, réceptions, collations de grades, et caetera.

Si, toute comme l'hôpital idéal, le système d'intercommunication idéal reste encore à créer, il n'en reste pas moins que les diverses catégories d'appels sonores que nous venons de discuter ont atteint un degré de perfection que nous ne saurions méconnaître. Chose certaine, c'est qu'ils fonctionnent pour répondre à des besoins précis. Les administrateurs d'hopitaux, les architectes, les ingénieurs, les constructeurs et les techniciens en équipements sonores savent qu'ils sont aujourd'hui indispensables, qu'ils sont pratiques et économiques et que leur emploi ajoute considérablement à l'efficacité fonctionnelle d'une construction hospitalière.

Les ingénieurs en science électronique travaillent présentement à l'application de la télévision dans les hôpitaux—une technique qui sera bientôt à la mode au Canada. Nous n'avons pas encore la télévision dans ces immeubles, mais si nos techniciens canadiens déploient la même sagacité et la même ardeur qu'ils ont fait montre lors de la création des systèmes d'intercommunication aujourd'hui en usage, nous pouvons être assurés de battre aussi la marche chez nous dans le domaine de la télévision spécialisée pour les hôpitaux.

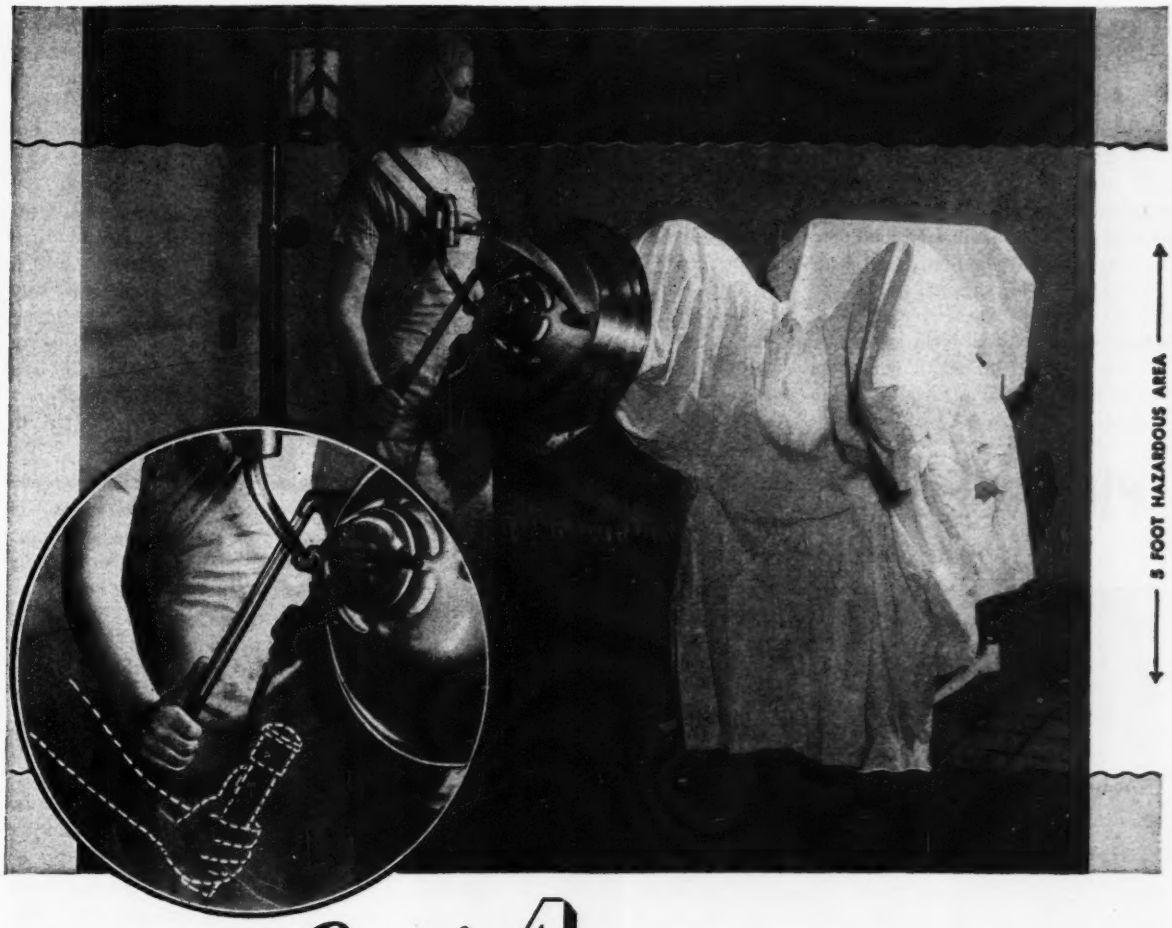
Toulouse-Lautrectomy

An art committee of the United Hospital Fund of New York City, where they think of everything, is working out a plan to put original works of art and fine reproductions in the city's hospitals. A proper selection of art on display in patient's rooms and wards, the committee believes, can have a beneficial effect on patients—a result that is called, reasonably, visual therapy.

The plan is to make a public appeal for pictures suitable for display in hospitals, it was explained. Suitability will be determined by a screening committee of artists, doctors and hospital administrators; pictures that get the nod will be sent along for display in the participating hospitals.

We foresee complications. In the first place, hospitals are going to have to develop art formularies, so obstetric patients won't be exposed to pictures that are just the thing for, say, fractured femurs. Here is a whole new clinical science to be learned; in art as in chemotherapy, what is good for the heart is probably bad for the stomach. Imagine, for example, what an overdose of Salvador Dali might do to a post-operative gastrectomy! Unquestionably, these and similar problems will become subjects for learned exposition and lively controversy on the hospital convention programs of the future; the Public Health Service will develop "Elements of the Hospital Art Gallery", and the hospital placement bureaus will do a brisk business in curators.

The more we think about this the dizzier it sounds. Right now, in fact, we feel a little faint—quick, nurse, a Picasso! — *"The Modern Hospital", April, 1953.*



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FINGER-TIP CONTROL — The beam of the Safelight is positioned with the speed and facility of a flashlight in the hand. In its three most popular models, there is no counter-weight, no heavy ball to cause exasperating head injuries. Its internal counterbalancing mechanism is smooth, effortless, and uses no functional devices or manual locks. (Note: No. 51 does have counterweight.)

EXPLOSION-PROOF SAFETY — Castle Safelights are truly safe from explosion because of their unique and scientific construction. They meet all Underwriters' requirements for hazardous locations. Patients and operating personnel are constantly guarded. Highly combustible gaseous mixtures cannot be ignited by any part of the Safelight or by phase of its use. This safety is mandatory in the operating room.

SUPERIOR QUALITY OF LIGHT — Doctors using the Safelight are amazed that its illumination so well compares with that of a major light. Its unique optics will illuminate the entirety of any deep cavity, yet without eye-tiring surface glare or contrast. With the Safelight, vision is better, easier and less fatiguing.

FOUR 4-STAR MODELS — The most popular Safelight model is the No. 52, floor type with pantograph arm . . . available with 4-footed or circular base. The Wall and Ceiling types, Nos. 53 and 54, also feature the "easy-as-pointing-a-flashlight" adjustability. An alternate floor model, No. 51, has a conventional ball counterweight. Floor model casters are static conductive and provide complete stability in all lamphead adjustments.

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MONTREAL

Health on the World Front

(Continued from page 47)

health workers than any comparable statement in history.

To hasten the day when all peoples shall enjoy "the highest attainable standard of health", WHO acts as the directing and co-ordinating authority on international health work. It helps governments plan national health programs, promote research and health education, supply travelling experts and seminars, set up health demonstration areas and send out health demonstration teams to work with local personnel until the latter can carry on unaided.

In treating and eradicating disease, WHO's major drives have been against malaria, tuberculosis, trachoma, yaws, smallpox, and the venereal diseases. WHO conducts its work by sending out expert consultants and demonstration teams who teach disease control methods to local technicians. These local assistants carry on after the original WHO personnel have left. In the battle against malaria, for example, WHO gave protection in 1951 to more than 50,000,000 people. At the same time, malaria control projects were begun or planned in various countries for the ultimate protection of 450,000,000 people or nearly one-quarter of the world's population.

Tuberculosis has also received the attention of WHO. A centre in Copenhagen, Denmark, is making extensive research in B.C.G. vaccination, which was carried out on a tremendous scale in Europe. This fight is now being waged in the Near East and East Asian countries—over 20,000,000 children have been vaccinated in recent years and the campaign is still going on with increasingly good results.

Many nation-wide vaccination campaigns are also under way to protect millions of people against smallpox. All pilgrims to Mecca are now being vaccinated against smallpox and cholera.

On the preventive side, environmental sanitation is of major importance. Technicians are now concentrating on the improvement of village water supplies to counter water-borne diseases such as dysentery and typhoid fever, and are constructing community sanitation facilities to eliminate breeding places of disease.

On all sides, trained personnel are essential and top priority has been given to training programs for all types of health workers. As part of its technical facilities, WHO collects and provides the world with health statistics and with information on epidemic diseases. There is a weekly broadcast from Singapore, Alexandria, Geneva, and Washington, to inform countries where new epidemics have started, thus helping these countries in taking measures which are described by international sanitary regulations, also drafted by WHO. The organization has also compiled and published standards for biological products, regulations on health statistics and the first international pharmacopoeia.

How is this vast international body organized? It is organized much like our own country. There is a parliament, called the World Health Assembly; a cabinet, known as the Executive Board; and a civil service which goes under the name of the Secretariat. The Assembly, consisting of representatives of the 80-odd member countries, meets each year—the Sixth World Health Assembly convenes this Spring—to determine policies, lay out program, and pass health measures. Between Assem-

GOOD FOR THE PATIENT . . . .
BETTER FOR THE NURSE . . . .

BEST FOR THE HOSPITAL!

In many hospitals nurses and kitchen help never seem to catch up on work. Morale is low and overhead keeps going up like a fever. But when management prescribes a strong dose of Lily* paper service, symptoms disappear almost overnight!

With Lily, meals are served like clockwork. Many foods are preportioned, and there is no breakage . . . less dishwashing. There are savings in detergents, hot water, and labor. Fewer people are needed to get things done.

To nurses Lily is a godsend. Serving trays are much lighter, and Lily is especially helpful for supplementary nourishments or in contagious disease wards. Lily's snap-on lids aid special diet cases by providing space for name and room number, and nurses save time and labor with handy Lily Graduate Cups for medicines, and cups for pills and water.

The continuous campaign against cross contamination is given an extra safeguard by Lily paper service. Patients get quiet, quick service and more appetizing meals because Lily keeps foods and beverages hot or cold longer.

We suggest that you mail the coupon, and learn how Lily paper service can help your hospital.

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bly sessions, the Executive Board, composed of 18 members drawn from member states but acting as individuals rather than as representatives of their respective countries, keeps the wheels turning.

Of these 18 members, 11 are bilingual in French and English and seven can speak at least another language apart from English and French.

In this country, as in many others, it is most important that for the education of the public in health matters we must use our two national languages, French and English. Last year, during one of the most important sessions of the Assembly, that of the nomination of the six countries to the Executive Board, I was very proud to note that, although we speak two languages in Canada, when the interpreter who was calling the 58 member states one by one to the ballot box, only one country was pronounced the same in the three official languages—Canada. I was even prouder to be a Canadian a few minutes later when my country received the highest number of votes of the eight countries on the nomination list.

A typical session of the Executive Board is carried out as follows: (1) paper work, agenda; (2) discussion; (3) resolution; (4) working parties; (5) amendments; (6) vote; et cetera.

It must be mentioned that the countries behind the Iron Curtain do not send representatives to the Assembly, although technically they belong to WHO. They are assessed each year as any other country but, as you have already guessed, contributions are not paid. As there are no regulations permitting a country to withdraw from the organization, these countries cannot resign, they just abstain.

Although WHO's headquarters are in Geneva, it is continually laying more stress on the work of its six regional offices which serve the South-east Asia region in Delhi, the Eastern Mediterranean region in Alexandria, the Americas in Washington, the Western Pacific in Manilla, the African in Brazzaville, and the European regions in Geneva. In these regional offices and at Geneva, the day-to-day work is carried on by the Secretariat.

Despite the considerable extent of its population, WHO has an annual budget of only $8,400,000, of which Canada's share this year is $270,000. However, since many of WHO's projects are conducted in co-operation with other organizations such as the Technical Assistance, the agency advises on the spending of many additional millions. Canada has pledged another sum of $750,000 for technical assistance.

With the support and co-operation of all of its active members—nations concerned in improving the health of their own citizens as well as that of the world's citizens—WHO continues its task of treating, eradicating, and preventing disease so that all peoples may steadily move forward towards "complete physical, mental, and social well-being".

The Wise Man's Task

Appearances to the mind are of four kinds. Things either are what they appear to be; or they neither are, nor appear to be; or they are, and do not appear to be; or they are not, and yet appear to be. Rightly to aim in all these cases is the wise man's task.—*Epictetus*

Coming Conventions

May 15-16—Annual Meeting of the Catholic Hospital Council of Canada, Ottawa.

May 17-20—Annual Convention of the Canadian Society of Laboratory Technologists, Macdonald Hotel, Edmonton, Alta.

May 18-20—Biennial Meeting of the Canadian Hospital Council, Chateau Laurier, Ottawa.

May 25-28—Annual Convention of the Catholic Hospital Association of the United States and Canada, Kansas City, Mo.

May 25-30—International Hospital Congress, London, Eng.

June 3-5—Institute on Hospital Maintenance, conducted by the Montreal Hospital Council, Windsor Hotel, Montreal, P.Q.

June 10-12—Annual Meeting of the Maritime Hospital Association, Algonquin Hotel, St. Andrews, N.B.

June 14—Annual Convention of the Catholic Hospital Conference of Saskatchewan, St. Paul's Cathedral Hall, Saskatoon.

June 20—Annual Meeting of the Saskatchewan Hospital Association, Saskatoon, Sask.

June 15-17—Annual Convention of the Canadian Dietetic Association, Chateau Laurier, Ottawa.

June 15-19—Annual Convention of the Canadian Medical Association, Royal Alexandra Hotel, Winnipeg, Man.

June 15-19—Western Canada Institute for Hospital Administrators and Trustees, University of Saskatchewan, Saskatoon.

June 22-24—Convention of the Comité des Hôpitaux du Québec, le Collège St. Laurent, St. Laurent, P.Q.

June 22-26—Annual Convention of the National League for Nursing, Cleveland, Ohio.

June 28-July 2—First Joint Convention of the Canadian Society of Radiological Technicians and the American Society of X-Ray Technicians, Royal York Hotel, Toronto.

Aug. 31-Sept. 3—Annual Convention of the American Hospital Association, San Francisco, Cal.

Sept. 7-12—International Congress of the World Confederation for Physical Therapy, Central Hall, Westminster, London, Eng.

Oct. 1-3—Annual Meeting of the Canadian Public Health Association, in conjunction with the annual meeting of the Ontario Public Health Association, Royal York Hotel, Toronto.

Oct. 13-15—Annual Convention of the Associated Hospitals of Manitoba, Royal Alexandra Hotel, Winnipeg, Man.

Oct. 19-21—Annual Convention of the Associated Hospitals of Alberta, Macdonald Hotel, Edmonton.

Oct. 26-28—Ontario Hospital Association Convention, Royal York Hotel, Toronto.

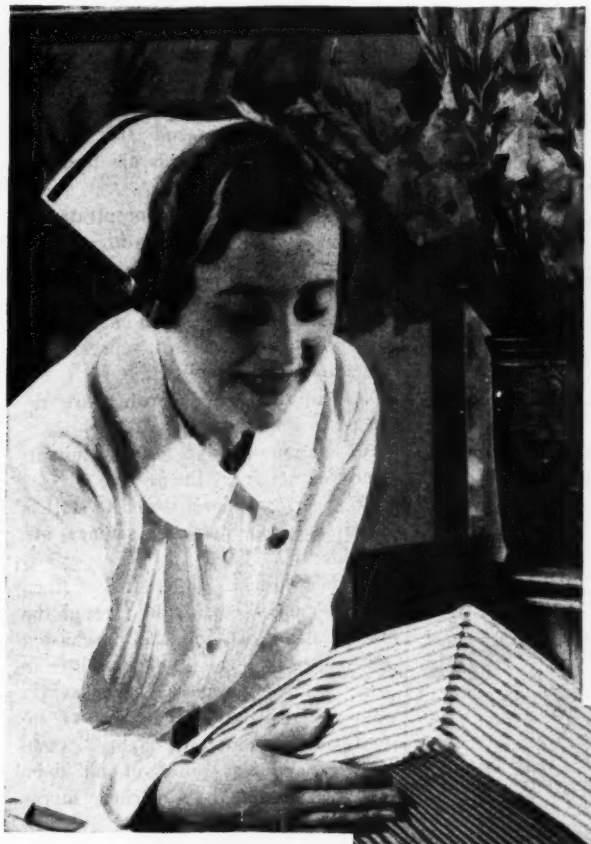
Oct. 27-30—Annual Convention of the British Columbia Hospitals' Association, Hotel Vancouver, Vancouver, B.C.

Oct. 29-30—Annual Convention of the Ontario Conference of the Catholic Hospital Association, St. Michael's Hospital, Toronto.

Study Administration of Homes for the Aged

Under the auspices of the Homes for the Aged Branch, Department of Public Welfare, Ontario, a four-day course of instruction for superintendents and other key personnel of county homes was held at Fairview Lodge, Whitby, last month. Among the subjects studied were: the Homes for the Aged Act; machinery of admission; business administration; the psychology of the aged; caring for the aged; medical services in the home; occupational and recreational therapy; dietary arrangements; fire precautions; and public relations. (The course provided an opportunity for staff members to learn the most recent developments in the field of caring for older people and for discussion of the problems common to county homes.)

The "school" was officially opened by the Honourable William Goodfellow, Minister of Public Welfare, and speakers included other government officials, as well as experienced administrators. Sixteen students were enrolled.



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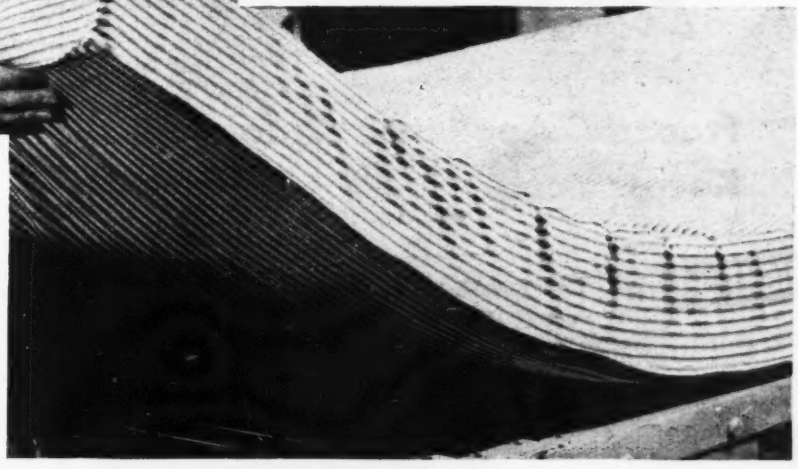
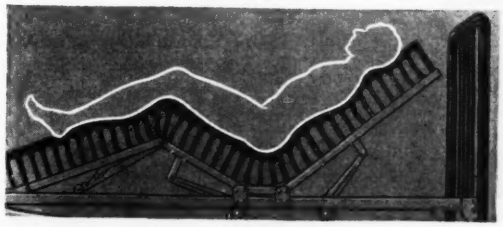
FOAM RUBBER HOSPITAL MATTRESSES

PILLOFOAM has never been known to wear out in over 20 years of hospital use . . . and original price is comparable with other mattresses which do require replacement!



Compare these PILLOFOAM Features with conventional Hospital Mattresses

- ★ Never been known to wear out.
- ★ Can be laundered or sterilized easily.
- ★ Covers are removable.
- ★ Patients prefer them for their exceptional comfort.
- ★ Prevent bedsores . . . self-ventilating . . . cool.
- ★ Nursing staffs prefer them for their lightness and ease in handling.
- ★ Allergy-free, dust-free.
- ★ Do not lump, pack or sag—never needs turning.
- ★ Retain shape indefinitely.



An important "plus" to patient comfort is the way "PILLOFOAM" mattresses mould themselves to patient's body on adjustable beds.

For full information regarding "PILLOFOAM" Hospital Mattresses phone or write your Hospital Supply House or nearest DUNLOP *Branch.*

PILLOFOAM is in use in many of Canada's hospitals and all hospital authorities agree that its long life is an important factor in achieving low maintenance costs. Why not consider a replacement program which will pay handsome dividends in economy, patient comfort and staff enthusiasm.

DUNLOP

Pillofoam

A FINER QUALITY FOAM RUBBER

Controlling Linens

(Concluded from page 36)

All wearing apparel issued to orderlies, cleaners, porters, ward aides, or dietary help, comes under the control of the linen committee. When issued, such items are recorded on a special card, signed by the employee. This card also contains a printed agreement whereby the employee agrees to reimburse the hospital for any loss of items destroyed through his or her own negligence. When the employee leaves the employ of the hospital, this card is checked with the articles returned, signed by the stock-keeper, and forwarded to the pay office as authorization to pay without deduction for uniforms.

Advantages

During the period this system has been in operation, numerous advantages have been noticed. They are as follows:

1. With the supply of clean linen available each day, head nurses have planned a system of distribution to the patients according to their needs.

2. The linen supply room has a full day in which to prepare the following day's requirements, and also knows whether the requirements are light or heavy.

3. The laundry can concentrate on supplying the linen room with articles in short supply each day.

4. The accounting department can be supplied with correct linen charges for each ward, floor, or unit, representing the amounts of linen used.

5. Pilfering and hoarding are reduced to a minimum.

6. The nursing staff loses no time in search of necessary linen.

7. Wearing apparel issued to staff is controlled and resulting savings are considerable.

In our opinion, the control of linen may be carried out further through the co-operation between the purchasing department and the linen committee in buying linen supplies. Large savings may be realized by co-operative investigations into the quality, washability, and durability of all linen samples submitted by various supply houses.

What is Morale?

Morale is a difficult word to define. It involves pride in the job, pride in the product, pride in oneself as a worker, pride in the institution, and pride in the community. In a business where morale is high there is a spirit of "working with" rather than "working for" the company. There is mutual loyalty and a spirit of give and take in advice and assistance.

The feelings of drudgery and boredom are less likely to raise their heads in an organization where morale is high. Probably the tasks we have, of whatever nature, seem endless and dull at times for everyone. We should be unwise and immature to demand that every moment of every day yield us experiences that are stimulating and eventful.

Personnel departments are involved in this matter because, strangely enough, the more competent the worker the more likely he is to fall victim to boredom. When his full capacities are not demanded by the job he becomes emotionally fatigued and his work descends to a wearisome sameness.—*Royal Bank of Canada "Monthly Letter"*

Optimal Diet

(Concluded from page 52)

important and that the presence of small quantities of the lesser known factors, pantothenic acid, pyridoxine, and others, which are present in the whole wheat but practically non-existent in either white or enriched bread may help to bring about increased growth. There are many people, however, who either cannot or will not eat whole wheat bread and, for them, enriched bread is the answer.

Another way in which diet helps to achieve and maintain health is in the control of body weight. In contrast to the protective foods many fats and most sugars contribute practically nothing except calories. Such foods include: pastry, gravy, mayonnaise, whipped cream, candy, cake, sweet cookies, and so many foods which taste so good. Yet, because of their limited value nutritionally, they are the first ones to be eliminated in a reducing diet. Butter, fortified margarine, and to a lesser extent, cream do contribute vitamin A and of course some fat is necessary in the diet. However, since all fat supplies 9 calories per gram in contrast to the four calories per gram for both protein and carbohydrate, all fats are usually restricted when the total calories must be kept down. Plenty of vitamin A can be secured from carrots, spinach, and other green and yellow vegetables when these fats must be restricted or omitted.

You can scarcely look at a magazine or newspaper today without seeing some mention of the need for and the value of weight control. It has actually been stated by an authority that in spite of all the scientific knowledge available the most serious nutritional problem on the continent is overweight. The term used is overnutrition which in many instances may actually be more dangerous than either malnutrition or undernutrition. Although mortality rates do not give the complete picture, they are worth noting. For individuals who are slightly underweight (5 to 14 per cent underweight) the mortality rate is about 1 per cent less than for those of ideal weight. When more than 15 per cent underweight, it is 8 per cent higher than the ideal group. The figures for overweight individuals are startling. For those who are 5 to 14 per cent overweight the death rate is 22 per cent above that for those of ideal weight and, when 15 to 24 per cent overweight, the rate is up 44 per cent. There is a 74 per cent increase in the mortality rate for those who are 25 per cent or more above their ideal weight. It is estimated that, at the present time, approximately one-quarter of the population may be considered overweight.

In closing, I would like to emphasize one point. In this country of ours, with its abundant supply of food and of educational opportunities, what we need is not so much more knowledge of nutrition or even a wider distribution of that knowledge. Both of these are important, I agree, and we can rightly expect both the knowledge and the imparting of it to advance. What is still more important, however, is a desire and a willingness to put into practice the information on nutrition which is so generally available. Most of us have a pretty good idea of what we should eat, how much and why, but how many actually put that knowledge into practice?

Courtesy in the hospital is religion in action.—*Msg. Charles A. Towell*

Operating a Psychiatric Hospital

(Concluded from page 46)

food, and modern treatment methods. A modern hospital today offers reasonable hope of cure where previously long years or a lifetime of incarceration faced the patient. The change in attitude is apparent in the public at large as well as in the thinking of psychiatric workers. Indeed, the change must be in the public mind, for it is the people who influence the legislators who, in turn, control the destiny of our mental health services through the allocation of public funds.

But much remains to be done. There is still an aura of stigma in connection with mental illness that places an extra handicap on patients and families striving for rehabilitation. Education has proved itself the answer to this and is being pushed vigorously.

Overcrowding, at a scale undreamed of in other types of hospital, has long been an obstacle in the proper care of psychiatric disorders. Many new buildings will be needed to provide the necessary space and to replace outmoded facilities. The cost of new buildings is high but the cost of maintaining thousands of chronic mental patients over the years is many times greater in terms of money alone, not to mention the human suffering and economic loss of productive individuals.

Despite long strides in public education, many persons cling to the old-fashioned ideas that insanity is a disgrace, that there is no cure, that it is hereditary, and so on. This attitude creates diffculties for the staff as well as the patients. When informing friends that one is employed at the mental hosptal, replies often indicate surprise. "Don't you find it terribly depressing?" "Say, do you really cure people out there?" These are typical of the questions often posed and do little to improve morale. The very size and remoteness of the hospital serve to accentuate an air of mystery and throw up a barrier to public enlightenment. As psychiatric wards appear in general hospitals, as preventive clinics become more common and as education progresses, this picture is changing.

Economically the cost of mental illness is staggering in money, in loss of productivity, in morbidity, and in human suffering. People generally understand only the present high cost in dollars and cents, failing to realize that the other forms of loss are much greater and that we must spend much more money to realize an over-all profit eventally. In particular, we must expand the preventive services, now barely started, for only in prevention lies a real cure.

As we surmount the educatonal barrier, more funds will be available and expansion of preventive services into every corner of the community will be possible. Finally, it is hoped, the huge psychiatric hospitals will decrease in size; and treatment of mental illness will be undertaken more and more at the community level. This, in a nutshell, is the heart of socio-economic planning to surmount the present inadequacies.

We have touched on some of the special problems of psychiatric hospitals and in particular those relating to size, location, staff and socio-economic factors. I have attempted to emphasize that psychiatric hospitals should be considered as hospitals first and special hospitals second and should like to draw the following conclusions:

1. Mental hospitals should be smaller to permit more individual care.
2. Where possible new building should take place close to medical and urban centres.
3. The hospital staff should be drawn closer to the community and vice versa.
4. There is need for standards for psychiatric nursing.
5. Public education in overcoming socio-economic difficulties is of the highest importance.
6. The changing trends and the basic plan to create modern, socially acceptable methods of treatment rest on the foundation of prevention.

A Work Creed

If you work in a profession, in Heaven's name work for it. If you live by a profession, live for it. Help advance your co-worker. Respect the great power that protects you, that surrounds you with the advantages of organization, and that makes it possible for you to achieve results. Speak well for it. Stand for it. Stand for its professional supremacy. If you must obstruct or decry those who strive to help, why—quit the profession. But as long as you are part of a profession do not belittle it. If you do, you are loosening the tendrils that hold you to it and with the first high wind that comes along you will be uprooted and blown away and probably you will never know why. — *"The Nursing Journal of India"*

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Please send me samples of Encore Soap and quotations on the following quantities:

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City or Town.....Prov.....

Small Hospitals

(Concluded from page 54)

very small hospitals and 27 per cent, 40 units in all, have less than 10 beds and can hardly be called hospitals. Counting the 16 nursing homes, as well, there are 56 units of less than 10 beds, 68 rated at 10 - 25 beds, and 40 rated at more than 25 beds.

How did all these small hospitals ever come into being? Some were built around doctors—skilled men who attracted numerous patients. The hospitals remained after the doctor had moved on or passed on. Some were built in isolated communities and improved transportation has substantially reduced such isolation. Some were built for the express purpose of attracting and holding a doctor. Others have been built by active public-spirited citizens who sincerely felt that such facilities would help to ensure the continuation of a healthy and thriving community.

Many of the small hospitals were built before laboratory and x-ray facilities became an essential part of diagnosis, back in the "good old days" when the help were paid at the rate of $10 a month and matrons stayed on the job for $50 per month—in the days when a trip of ten miles was a major journey. Now the hospitals remain to carry on as best they can with inadequate facilities, inadequate staff, inadequate financial support for both capital and operating accounts, and thus inadequate care and treatment for the patient.

Many of the hospitals are converted residences, others were built from designs prepared by people with a very limited knowledge of requirements in the modern hospital. Many were built with very limited funds at a time when modern methods of care and treatment had not been developed, and when it was no problem to engage and pay additional staff, who would not have been necessary had there been a little more planning or a few more facilities. Many hospitals were built with very little concern for the life of the helpless patient in the event of fire.

Modern rapid advances in medical science have increased the use of laboratory and x-ray facilities so rapidly that the supply of trained technicians is insufficient. The increase in the number of hospital units has made the shortage doubly acute.

Many small hospitals have been dogged with financial difficulties since their inception. In 1939, the operating costs of hospitals in this province amounted to $2.69 per person. During the past 13 years, hospital costs have gone up, hospital utilization has increased, and the population of the province has declined. In 1950, the cost of hospitalization amounted to $15.86 per person in Saskatchewan as compared with $2.69 in 1939, and present costs are still higher. In many cases, it costs more to look after patients in the small hospitals than in the large one.

Many of our small hospitals are filling a very definite need in providing services to patients. However, when we look at the problems they face and the standards of service they are able to provide, is it fair to the patient, the nurse, and doctor to hang on tenaciously to our small holdings, when service could be improved and enlarged if we threw in our lot with larger units?

Although this is a subject in itself, may I suggest that the cost of building and operating a small hospital would provide a first-class ambulance, with some money left over for road building and maintenance.

In conclusion, I would like to repeat —the problems of small hospitals are to a great extent contingent on the fact that there are too many small hospitals. Rather than the problems of small hospitals, we should in all probability be dealing with the "small hospital problem".

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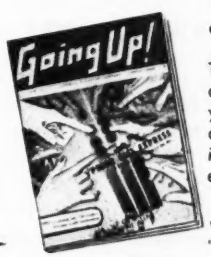

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Dietitian Wanted

An Assistant Dietitian (qualified) for two hundred twenty-five (225) bed hospital. Apply to Chief Dietitian, Moncton Hospital, Moncton, N.B.

Administrator Available

Secretary of group of 7 hospitals in England, seeks post as Administrator of hospital in Canada. Age 34, highly qualified, 17 years experience in hospital administration. Apply to Box 531R, The Canadian Hospital, 57 Bloor St. West, Toronto.

Wanted

Assistant to the Registrar, College of Physicians and Surgeons of Saskatchewan.
This is a responsible position and offers a very interesting vocation in a beautiful Western city. Complete office training essential. Apply in own handwriting stating age, experience, education and salary expected to:
College of Physicians & Surgeons of Saskatchewan, 415 Birks Building, Saskatoon, Saskatchewan.

Pharmacist Available

M.S. Degree, educated in U.S., age 32, currently chief pharmacist in university hospital in U.S., desires position with opportunity to teach chemistry and/or materia medica to student nurses. City under 250,000 preferred. Box 472 G, The Canadian Hospital, 57 Bloor St. W., Toronto.

Dietitian Wanted

DIETITIAN WANTED for an 82 bed hospital. No training school. Salary $260.00 to $280.00 per month. Room, meals and laundry of uniforms may be provided for $30.00 per month. Apply stating qualifications and experience to Superintendent, Canora Union Hospital, Canora, Saskatchewan.

Administrator Wanted

North Bay Civic Hospital, North Bay, Ontario. Apply by letter only, giving full particulars of education, business experience and qualifications which suit you for the position. Applications treated in confidence. Apply to Chairman of the Board, North Bay Civic Hospital, North Bay, Ont.

Dietitian Wanted

Wanted—Dietitian for 500 bed hospital. Reply stating qualifications, experience and salary expected to Business Manager, Regina Grey Nuns' Hospital, Regina, Saskatchewan.

Medical Record Librarian Wanted

Medical Record Librarian Wanted for 500 bed hospital. Good prospects for opening a school of Medical Record Librarians. Reply stating qualifications, experience and salary expected to Business Manager, Regina Grey Nuns' Hospital, Regina, Saskatchewan.

X-Ray Technician Wanted

X-Ray Technician needed for five weeks' relief, to begin approximately May 18. Apply in writing stating salary expected to Superintendent, Soldiers' Memorial Hospital, Campbellton, N.B.

Federal Grants

(Concluded from page 20)

hospitals and by public health workers in Fredericton and district.

Tuberculosis

To aid in the control of tuberculosis in northern Saskatchewan, x-ray equipment is to be installed in St. Martin's Hospital, Portage La Roche, with the help of a federal health grant. Public health officials have found that the case rate and the death rate from tuberculosis are much higher in the far northern part of Saskatchewan than elsewhere in the province. To overcome this situation, the Saskatchewan Anti-Tuberculosis League is anxious to install x-ray equipment in outpost hospitals so that all persons admitted to hospital will receive routine chest x-rays. The equipment will also be used for chest x-rays for outpatients and for the population generally. In this way it is hoped that unsuspected cases of tuberculosis will be detected earlier and treatment begun.

At Portage La Roche, St. Martin's Hospital serves a community of 670 of whom 11 are white, 130 Indian, and the remainder of mixed blood. Cost of the x-ray equipment for the hospital is estimated at $2,500.

An extensive investigation into a method of treating tuberculosis meningitis with cortisone, streptomycin, para-amino-salicylic (PAS) and isoniazid is being carried out at the Point Edward Hospital, Sydney, N.S., with assistance from federal research funds. Tuberculosis meningitis is a relatively serious problem and in 1951 accounted for 302 deaths out of 3,422 for all types of tuberculosis. Although the mortality rate for pulmonary and other forms of tuberculosis is falling steadily, the death rate from tuberculosis meningitis still remains high.

The treatment program involves use of cortisone in combination with antimicrobial agents such as strepomycin, PAS and isoniazid to determine whether the recovery rate from this form of therapy is as high or higher than that obtained by conventional medical and neurosurgical methods of treatment. The federal grant of $3,000 will be used to buy cortisone acetate for the study. Some research has already been done on this problem at the Point Edward Hospital with encouraging results.

Floor Supervisors

Wanted: Floor Supervisors with experience; Operating Room Supervisor, experience considered but special preparation preferred. Please apply, stating salary, etc. direct to Superintendent, Soldiers' Memorial Hospital, Campbellton, N.B.

Business Manager—Comptroller

Competent young hospital executive available. 7 years hospital accounting and management experience, 5 years as Business Manager. Member of A.A.H.A. Box 342, The Canadian Hospital, 57 Bloor Street West, Toronto 5.

Dietitian Wanted

Wanted—assistant dietitian for Saint John Tuberculosis Hospital, East Saint John, N.B., 300 beds. Apply to Dietitian.

Kitchener-Waterloo Hospital

Applications are being received for the position of Director of Nursing; Hospital capacity 400 beds including 71 bed chronic wing. This position would include the overall supervision of nursing and education with Associate Director for School of Nursing, 94 students, and Assistant in nursing service.
Applications should be addressed the Administrator, Kitchener-Waterloo Hospital, stating qualifications and experience.

Have you renewed your subscription to The Canadian Hospital?

Techniques for Easier Painting

Roller coaters make the transfer of colour onto a smooth surface "easier than you may think", reports the National Paint Varnish and Lacquer Assn. Inc. These devices also come with extra-long handles for reaching ceilings and upper wall areas. Even with the advent of rollers, however, a brush or two still is needed for corners, doors, door frames, and windows. Re-coating the ceiling first is suggested when it is to be of a different colour than the walls. But first, all cracks should be filled, then smoothed level.

Small hairline cracks can be filled with spachtling material which can be applied with a putty knife or with thumb and finger. Since the filler sets rapidly, the surface should be smoothed before the spachtling material is quite dry, thus lessening the amount of sanding that will be required.

Larger cracks often need to be filled with patching plaster and it is sometimes necessary to undercut the crack so that the plaster will be anchored firmly when it is dry. Ceiling painting should be worked across the width of the room, so that a second lap can be started before the first has dried completely. A strip not more than 2 feet wide is recommended.

The procedure suggested by the association for painting walls is to start at the upper left hand corner and work downward with a strip about 2 feet wide. Last on the schedule is the woodwork.—"*Institutions Magazine*"

Vitamins for Resistance to Stress

Efficient functioning of the body in emergencies or under other conditions of stress is to a great extent dependent on adequate nutrition. Drs. Robert S. Goodhart and Norman Jolliffe, writing in *The Merck Report*, point out that both experimental animals and men, when subjected to low oxygen tension, cold, or other acute stress, show increased requirements for vitamin C. For this reason, liberal quantities of fruits and juices containing this vitamin are recommended for persons who may be exposed to such conditions. Several of the B vitamins also seem to be involved in the complicated reactions of the body to both acute and chronic stress.

Let thy speech be better than silence, or be silent.—*Dionysius the Elder*

Provincial Notes

(Concluded from page 56)

subscription campaign will commence this month, with an objective of $125,000.

* * * *

WINDSOR. Construction of a new nurses' residence at Grace Hospital is scheduled to commence this month. It will provide accommodation for 141 members of the nursing staff.

* * * *

WINDSOR. A new nurses' residence for the Essex County Sanatorium was officially opened in March. It is known as the Margaret Bartlet Nurses' Residence. On the ground floor are rooms for seven nurses, suites for the director of nursing and her assistants, as well as a spacious lounge and reception room. The second floor contains 18 rooms for nurses and a small common room. In the basement are a large recreation room, storage and laundry facilities, as well as a classroom.

Manitoba

WINNIPEG. A cobalt bomb was installed in the Cancer Research and Relief Institute annex at the Winnipeg General Hospital last March. The cost of the $48,000 bomb will be shared by the federal and provincial governments.

* * * *

SELKIRK. It is proposed to build a new 60-bed general hospital here to replace the present 50-bed hospital. The new hospital would cost $426,000 and would provide accommodation for the Selkirk health unit, and the Selkirk laboratory and x-ray units. Construction would also include a 30-bed nurses' residence.

Saskatchewan

REGINA. Some of the Regina General Hospital employees are asking for a five-day week. Most workers are now on a 5½-day week although some work five days one week and six days the next. The union has also asked for the abolition of split shifts for kitchen employees and ward aides.

Alberta

LETHBRIDGE. Construction has commenced on the new $2,800,000 municipal hospital. The building will be five storeys high and have four wings with provision for the addition of a fifth if it is needed at a later date. The 187-bed hospital is expected to be completed within two years.

* * * *

TABER. It is proposed to construct a new wing for the Taber Municipal Hospital. The wing would have about 40 beds and major and minor operating rooms. Cost of the proposed addition is estimated at $300,000.

British Columbia

CASTLEGAR. Initial steps have been taken toward constructing a 32-bed

hospital in this area. It is estimated that the cost of the building would be approximately $400,000.

* * * *

COLWOOD. The first unit of a hospital at St. Mary's Priory was officially opened last March. The unit contains 24 beds.

* * * *

GORDON HEAD. A new 70-bed solarium will be built here to replace the present Queen Alexandria Solarium. The site for the new solarium is a beautiful 40-acre piece of property just three miles away from the Royal Jubilee Hospital and six miles from the centre of Victoria. It is hoped to finance the new crippled children's hospital from the present solarium's capital reserve funds, from provincial and federal grants, and a public subscription campaign.

* * * *

TOFINO. The British Columbia Hospital Insurance Service has given approval for the construction of a new hospital to replace the old institution which burned to the ground last summer. The new T-shaped hospital will contain 17 beds, a nursery, treatment room, x-ray suite, operating and delivery rooms, laboratory, as well as office space, and living quarters for the matron. It will cost approximately $177,534 and be constructed to the design of Whittaker and Wagg, architects, Victoria, B.C.

* * * *

TRAIL. Completion of the new Trail-Tadanac Hospital is expected in about 13 months. At present, work on the $2,000,000 project is still in the structural stage with completion of the "shell" scheduled for the end of this month. The hospital will have 151 beds and be five storeys high.

This is administration?

From *Time* magazine's obituary: "Stalin was an administrative genius . . . It took skill to pick devoted men, to enlist their talents while subduing their ambitions, to reward or discard, flatter or blackmail, soothe or scourge, at the necessary moment. Stalin governed by a cunning balancing of tensions and was himself aloof and unhurried."

Water Conditioning

(Concluded from page 45)

boiler feed water; and (c) soften all the hot water used throughout the building.

This results in the elimination of scale in boilers, water heaters, hot water piping, et cetera, and thus reduces the cost of repairs and replacements. This softened water makes all cleaning much easier, such as dish washing and floor scrubbing. There will also be no soap rings on bath tubs and wash basins with decreased cleaning costs. Better coffee and tea can be made with soft water; and it greatly adds to the comfort of the patients.

One other ingredient of water that causes a great deal of trouble is the presence of iron or manganese. These cause stains on laundered materials, also on plumbing fixtures, wash basins, et cetera, which are all too noticeable and very difficult to remove. If the source is a deep well and the water is clear when first drawn the iron and manganese can be removed in the softener in the same manner as the hardness salts.

In choosing water conditioning equipment, the laundry manager should pay particular attention to the sizing of the equipment as well as the integrity and experience of the manufacturer.

Recently, a survey was made of an existing laundry in a large hotel. A stop watch test showed it took 2 minutes and 15 seconds to put 10 inches of water into a 42" x 84" wash wheel. This gave a flow of 60 gpm. Thus, it would take a total of 140 minutes to supply hot and cold water to all the washers involved for a single wash. If the softeners had been properly sized to a flow of around 154 gpm., it would take about 54 minutes per pound. They would then save 96 minutes per load for all machines and, on an hourly formula, this would mean 12.8 more loads per day with the existing wheels. In other words properly sized softeners would have provided the hotel with the same results as the installation of another wash wheel.

Finally, there is a possibility that, after a water softener has been installed, scale which is present in the hot water storage tank, will be removed. Any corrosive elements in the water such as free carbon dioxide and oxygen may then start to rust the tank shell. The result will be iron rust going into the wash wheels. This can be prevented by an inhibitor which will protect the tank.

Sign of Maturity

It is a sign of maturity to recognize the need for objective criticism. Far from being disloyal it epitomizes loyalty for it takes a high quality of courage to go against the stream. — *Janet Geister*

Economy in Oxygen Administration

What are the factors included in the over-all cost of oxygen administration? The first factors are the cost of oxygen and its handling and the cost of purchasing and maintaining equipment. Wasted oxygen is a factor that is frequently overlooked but it can be a very expensive item.

To be of any benefit therapeutically, oxygen must be delivered in adequate concentrations into the patient's lungs. Oxygen which never reaches the lungs, but is left in the cylinder or escapes through leaks, is of no help to the patient. Oxygen which reaches the lungs in inadequate concentrations does not benefit the patient fully.

Frequently, cylinders that are a quarter or even half-full are returned to the oxygen supplier as empty. The residual oxygen, for which the hospital has paid, is entirely wasted. Returning unused oxygen really amounts to increasing substantially the price the hospital pays for the oxygen used. Of course, in certain isolated cases returning partially full cylinders may be unavoidable or the lesser of two evils. However, in general, careful planning can eliminate most of this waste.

Oxygen can also be lost through leaks in faulty connections, worn-out tubing, imperfect gaskets, and the like. Yet the hospital pays for this wasted oxygen. Loss of oxygen through leakage can easily be avoided by checking apparatus and all connections for leaks.

Wastage represented by the administration of inadequate concentration of oxygen is more difficult to evaluate but it does exist. For example, when a physician prescribes tent therapy, he usually assumes that his patient will receive 45 to 50 per cent oxygen. If, as has frequently happened, an average tent is operated at a flow of only 5 to 6 liters per minute, the concentration of oxygen within the tent will be very little above that of room air. Under these circumstances, the patient will not respond to the therapy. This can be expensive and inconvenient for the patient as well as for the hospital as the patient may be hospitalized for a longer period than would have been necessary.

To avoid waste and thus save on oxygen administration costs, use as much of the content of each cylinder as is practical, inspect apparatus for leaks regularly, and make certain that the patient receives the concentration of oxygen prescribed.—*Oxygen Therapy "Bulletin".*

Just Living

Health is most worth while to conserve. I do not mean simply the abounding vigour of youth, with abundance of fresh air and exercise and with its reserves which seem to mock the warnings of elders. I mean, rather, the sustained and protected strength which is based on the conservation of physical resources and gives promise of a long life well lived. In our outward journey the ranks are rapidly thinned by the passing out of those who have had their brief stay and were soon done. When their notes matured they were unable to meet them. Nothing is sadder than these physical bankruptcies, which deprive men and women of opportunities when, with the capital of experience well invested, they should have the most ample returns. — *Charles Evans Hughes.*

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When Whitato is used no excessive water has to be evaporated from the potatoes. It gives them a drier surface. This reduces the time required for frying—and often eliminates the need for pre-cooking French Fries.

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Since the raw potatoes do not darken, the fried potatoes have a brighter, more appetizing color. Flavor is also improved because long soaking is eliminated.

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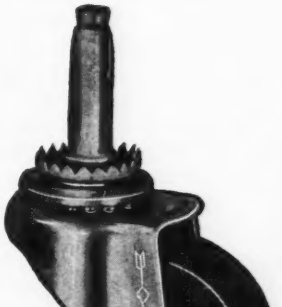

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. . . Across the Desk

G. F. Benson

Mr. G. F. Benson, who was President and Managing Director of The Canada Starch Company from 1906 to 1938, was born in Montreal, Quebec, on December 12, 1864. Educated at Uppingham School, Rutlandshire, England and University College, Oxford, Mr. Benson returned to Canada and became a partner in W. T. Benson and Company in 1885, a company founded by his father in 1858. The following year, with the incorporation of the Edwardsburg Starch Company, he became a Director of the new Company. In 1894 he was made President of this Company, a post he held for six years when he also became Managing Director. When the Edwardsburg Starch Company absorbed the Brantford Starch and the Imperial Starch Companies to form The Canada Starch Company in 1906, Mr. Benson became President and Managing Director, posts which he held for the next 32 years, when he became Chairman of the Board. This office he retained until the time of his death, April 11th, 1953.

Active throughout business circles, Mr. Benson was long associated with the Montreal Board of Trade as Council Member, Treasurer and President. He was a Governor of the Montreal General Hospital and until recently a Director of the West Kootenay Power and Light Company of Bonnington Falls, B.C.; Director of the Montreal Telegraph Company and of the Montreal City and District Savings Bank, and a Member of the Canadian Board of Trustees for Guardian Assurance Company of London, England.

In 1890 Mr. Benson married Ethel-dred Norton Frothingham who predeceased him July 14, 1945. He is survived by his sons, G. F. Benson Jr., President of The Canada Starch Company Limited, and Wm. D. Benson, senior partner of R. Moat & Company, and one daughter, E. Dorothy Benson: two grandchildren, Willa K. Benson and George H. Benson, all of Montreal.

* * *

McGlashan Clark Company Offers Coronation Souvenirs

An interesting array of coronation silverware is being shown by McGlashan Clarke Company Limited, of Niagara Falls, Ont.

Among the selections is included a British Monarch series of nine individual spoons, from Queen Victoria to Queen Elizabeth II, in a presentation case. The set is available in sterling silver and in silver plate. There are also individual Elizabeth II spoons in sterling and silver plate.

One of the oldest pieces of regalia that will be used on this colourful occasion is the anointing spoon. A gold plated replica of this ancient spoon is one of the McGlashan Clarke offerings. There is also a souvenir coffee spoon with a sterling silver replica of Queen Elizabeth II on the handle.

The Company has been appointed Canadian agents for Cooper Brothers, one of England's oldest silversmiths, and some of their most interesting pieces have been imported from England for inclusion in these coronation year offerings.

* * *

A British Industry is Born

A great new enterprise has just been completed. It has involved the construction of two plants at a cost of one million and a quarter pounds.

First part of this enterprise was the installation by Ilford Limited, Ilford, London, England, of an additional film-coating unit of the most modern design. Second part, which marks the birth of a vital British industry, has meant the construction of a new plant, jointly owned by Ilford Limited and BX Plastics Ltd., for manufacturing film base.

The twin project will end the shortage of x-ray film which in past years has handicapped British hospitals and slowed up various aspects of medical research. In the past, nearly all x-ray film base has been imported from the U.S., with small quantities coming from Belgium. It represents a third of the total cost of manufacturing x-ray film.

The two new plants were timed to come into operation simultaneously so that the film base, never before produced in Britain, could enable Ilford Limited to step up output of x-ray film, with their additional coating unit, and yet almost entirely eliminate dollar spending.

Ilford Limited are Europe's largest makers of x-ray film, and already supply 60 per cent of the amount used in the United Kingdom. A large proportion of their output is exported, especially to Commonwealth countries. Now, with greatly increased production, it will be possible for Ilford Limited to boost exports throughout the world and earn valuable foreign currency for Britain.

* * *

G. H. Wood Coronation Decorations

With the approaching Coronation of Her Majesty, Queen Elizabeth II, the Creative Art on Paper division of G. H. Wood & Co. Limited have produced decorations to commemorate the occasion.

Coronation plaques of royal emblems are heavily embossed die-cuts with a rich, gleaming gold finish suitable for use indoors and outside. They can be easily put up with cellulose tape, staples or tacks.

These Coronation decorations are available in sets of 26 assorted pieces or can be purchased individually. The regal emblems consist of the Royal Coat of Arms in two different sizes, the large size 19″ x 13″, the smaller size 12″ x 9″. These sparkling embossed emblems add lustre and beauty on such an occasion.

Full information may be obtained by writing to G. H. Wood & Co. Limited, Toronto.

(Concluded on page 108)

Across the Desk

(Concluded from page 106)

Eric F. Walker With Philips Industries

Philips Industries Limited announce the appointment of Mr. Eric F. Walker to the Ontario X-Ray Division.

Mr. Walker has had considerable experence in x-ray engineering over the past years. A member of both British and Canadian Engineering Institutes, he started his association with medical x-ray as research engineer on super voltage development with Metropolitan-Vickers Electrical

Eric F. Walker

Engineering Co. Ltd., Manchester, England. Prior to leaving England he was technical advisor to the Sales Manager of General Radiological Co. (Siemens) London, and in charge of hospital service in that area.

Mr. Walkers' general technical and practical experience will enable him to offer Philips' x-ray customers courteous and efficient service both in the choice of suitable equipment and associated maintenance.

* * * *

Whitato Keeps Potatoes Fresh and White

The oxidation or discolouration of potatoes after peeling and slicing has always been a major problem in the preparation of potatoes. Many institutions place the sliced potatoes in water to retard discolouration.

However, water storage requires space and excessive handling. Placing water soaked potatoes in the deep fat fryer, for instance, causes foaming of the cooking fat and retards frying.

Whitato, the new anti-oxidant especially developed by the L. L. Antle & Company, Inc., manufacturers of anti-oxidants for the food industry, is the perfect answer to these bothersome problems, it is claimed.

Whitato is in powder form and one tablespoon added to 1 gallon of water makes a solution or dip. After potatoes are sliced they should be dipped into the solution for not less than 1½ min. and allowed to drain.

Whitato treated potatoes will remain fresh and white for at least 48 hours, allowing for peeling and slicing far in advance of requirements.

This product is equally effective in retarding the discolouration of apples, peaches, and other similar fruit where oxidative discolouration is a problem.

The distributors of Whitato in Canada are McKague Chemical Co. Limited, Toronto.

* * * *

G. F. Sharpe Now Gibbons Sales Manager

Mr. C. W. Gibbons of Gibbons Quickset Desserts, Toronto, announces that Mr. George F. Sharpe has now assumed the sales management of his company. Mr. Sharpe was formerly district sales manager of Cow & Gate, both in Toronto and Montreal, and has had extensive experience in the institutional field. Mr. Gibbons still retains his association with the company.

* * * *

Catalogue on Surgical Lights

Complete descriptions of modern surgical lights, including the new Surg-o-beam, are featured in an illustrated catalogue, "Light for Surgery", obtainable from the Ohio Chemical & Surgical Equipment Co. (a division of Air Reduction Company, Incorporated), Madison 10, Wisconsin.

Presented as special features of the new Ohio Surg-o-beam are excellent shadow reduction, wide coverage, great maneuverabilty, high quality of light, universal focus, open design, sturdy construction, and easy manatenance. In addition, the catalogue shows a detailed sketch of the hanger assembly, recommended wiring diagrams, roughing-in data, and location plans.

Complete details and diagrams are also provided for Ohio's Multibeam explosion-proof light, standard and explosion-proof Surg-o-Ray ceiling lights, and portable, standard, emergency, and explosion-proof Surg-o-Ray lights.

To obtain a free copy of this informative light catalogue please request Form No. 2113B.

* * * *

Fisher & Burpe Limited Appointment

Mr. R. W. Finlayson, President of Fisher & Burpe Limited, announces the appointment of Mr. Fred A. Lewis as Manager, Western Division of the Company. As a result of the Com-

Fred A. Lewis

pany's expansion into Ontario, Quebec and the Maritimes it was found necessary to decentralize the Company's operations. Mr. Lewis will supervise the sale of physicans' and hospital supplies in the Company's western offices situated in Winnipeg, Edmonton and Vancouver and will be in charge of the factory at St. Boniface, Manitoba.

* * * *

There was an old fellow named Sidney,
Who drank till he ruined a kidney;
It shriveled and shrank
But he drank and he drank—
He had fun doin' it—dideney?

—Don Marquis.

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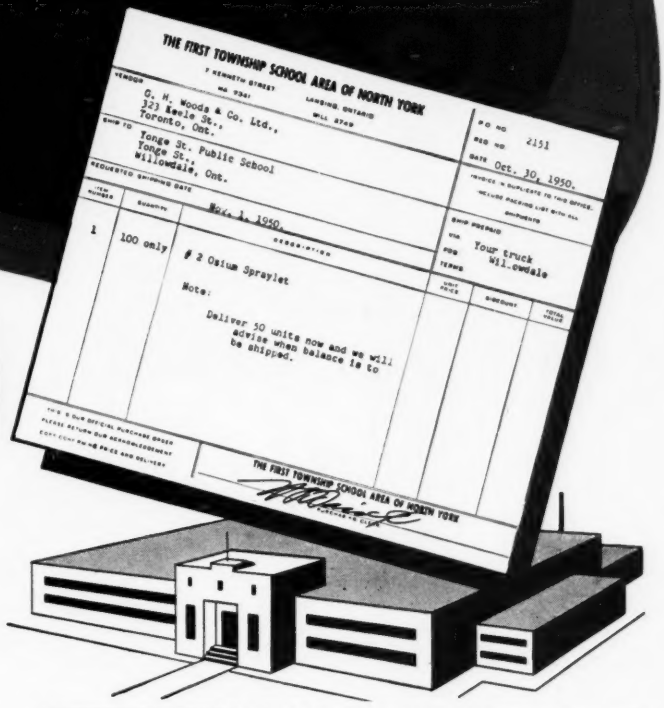

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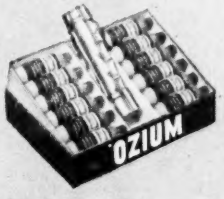

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